Austria Sch22	Indonesia Rp3100	Portugal Esc120
Bahrain Din0.650	Israel NS3.50	S.Arabia Rls7.00
Belgium BFr48	Italy L1700	Singapore S$4.10
Canada C$1.00	Japan Y600	Spain Pta145
Cyprus C£0.90	Jordan Fils500	Sri Lanka Rup30
Denmark DKr10.00	Kuwait Fils500	Sweden SKr9.00
Egypt E£2.25	Lebanon $1.25.00	Switz SFr2.30
Finland Fmk7.00	Lux LFr48	Taiwan NT$65
France FFr6.50	Malaysia Ringgit4.25	Thailand Bt50
Germany DM2.30	Mexico Pes700	Tunisia Din0.800
Greece Dr120	Morocco Dh6.00	Turkey L1200
Hong Kong HK$12	Neth Fl3.00	UAE Dh6.50
India Rup15	Norway Nkr10.00	USA $1.00

EUROPE'S BUSINESS NEWSPAPER

FINANCIAL TIMES

No.30,633 Monday September 5 1988 D 8523 A

SOUTH AFRICA

Zimbabwe's history lesson for Botha

Page 17

World News

Tutu defies SA law with call for poll boycott

ARCHBISHOP Desmond Tutu yesterday called on Anglicans not to vote in South Africa's municipal elections – a call which he admitted was illegal.

The call puts him a direct confrontation with the Government, which has prohibited advocating an election boycott. He said that the Government was guilty of intimidation by wanting to force people to vote. Page 3

Le Pen proceedings

The French justice ministry has begun proceedings against Mr Jean-Marie Le Pen, leader of the far-right-wing National Front after criticising a minister with a pun on Nazi concentration camps. Page 2

Takeshita boost

Japan's ruling Liberal Democratic Party (LDP) won an election, dashing opposition hopes that the vote would reveal antipathy to tax reform plans. Page 3

Gandhi retreats

Mr Rajiv Gandhi, India's Prime Minister, backed down in announcing that his Government would delay legislation that would have restricted investigative reporting by Indian newspapers. Page 3

Sweden election

Sweden's ruling Social Democrats look set to win more votes than the non-socialist bloc in the September 18 general election, but may need the Greens to form a government, say opinion polls. Page 4

Chileans rally

Chilean opposition groups organised a mass rally in Santiago, calling for a "no" vote in the October presidential plebiscite, in which General Augusto Pinochet is to be the only candidate. Page 2

Sudanese starve

Scores of people are dying of hunger every day in an isolated town in south west Sudan, a Sudanese army officer said. A Khartoum newspaper reported 8,000 people had died there so far. Page 3

UK warship holed

A UK destroyer was holed on its port side and 11 crewmen aboard were injured when it collided with a container ship it was escorting toward the Strait of Hormuz at the entrance to the Gulf.

Soviet phone in

A Communist Party meeting in Gorky was broadcast live on Soviet television and viewers were able to phone in questions, as part of the Kremlin's drive for glasnost. Page 3

Burma warning

Burma could be heading for civil war unless the besieged ruling party agreed to return to democracy, a US official warned. Page 3

Japan's "free ride"

Japan has enjoyed a "free ride" in basic research and must now start to take the initiative in research in areas such as materials, biotechnology and electronics, said an agency affiliated to Miti. Page 4

Yugoslavs protest

Over 65,000 Serbs marched in Smederevo, south of Belgrade, calling for action to be taken against the ethnic Albanians who live in the autonomous province of Kosovo. Page 2

Leaders back PLO

The leaders of Egypt and Jordan expressed support at the weekend for moves in the PLO to fashion a new political programme to help solve the Arab-Israeli dispute. Page 2

Israeli 'spy' trial

An Israeli businessman goes on trial behind in Tel Aviv today on charges of spying for the Soviet Union. Page 2

Snoring cure claim

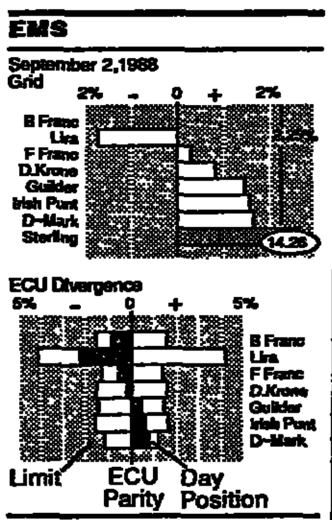
Chinese scientists claim to have a cure for snoring: nasal drops made from natural ingredients, said the official China Daily. The remedy, said to be 95 per cent effective, should go into mass production next month and be exported.

Business Summary

South Korea plans full convertibility for won

SOUTH KOREA is to make its currency, the won, fully convertible in the next few months thus removing restrictions on the won's use in the foreign exchange market and in the settlement of many transactions. Page 18

EUROPEAN Monetary System: The D-Mark remained the most improved currency from central rates last week. The firm undertone gave rise to fears that French interest rates would have to increased again in order to protect the French franc. The Italian lira lost ground to the buoyant D-Mark, and was fixed at a three-month in Milan on Friday. The Belgian franc was also weak, but remained comfortably within its divergence limit.



The chart shows the two constraints on European Monetary System rates. The upper grid, based on the weakest currency in the system, defines the cross-rates from which no currency (except the lira) may move more than 2¼ per cent. The lower chart gives each currency's divergence from the "central rate" against the European Currency Unit (ECU), a basket of European currencies.

OSAKA, Japan's second city, scored a victory over Tokyo on Saturday when the cities' rival stock exchanges simultaneously launched stock index futures and the Osaka exchange grabbed the greater share of volume. Page 21

PARMALAT major shareholder, Calisto Tanzi and other lesser shareholders in the Italian food empire rejected acquisition overtures from Kraft of the US worth a possible L700bn ($505.4m). Page 21

NATIONAL Australia Bank, one of Australia's three biggest private sector banking groups, plans to raise up to A$700m (US$555.3m) from bond issues in the domestic market and in the US. Page 22

SWEDEN'S Stock Exchange should ban listings of companies where one shareholder controls more than 50 per cent of the voting power, a team of investigators said. Page 22

TURKEY plans to borrow the equivalent of $700m from Japan this month in a move that looks likely to meet its debt servicing needs for the rest of 1988. Page 22

BLUE ARROW: Tony Berry, chairman of the world's largest employment services group, said a group of American financial institutions would be prepared to fund a management buy-out. Page 23

AMERICAN Savings and Loan: the future of the bankrupt US thrift institution, subject of negotiation by Robert Bass, wealthy Fort Worth investor, remained uncertain after the expiry of a deadline set by the Federal Home Loan Bank Board. Page 21

ITALY: The value of Italian exports leaped by 29.2 per cent in May, the monthly trade balance showing L325bn ($234.6m) deficit compared with L1,435bn in May 1987. Page 2

STATOIL, Norway's state oil company, and Himont, the US-based polypropylene subsidiary of Italy's Ferruzzi-Montedison are to continue their discussions after they were halted earlier this year by the Norwegian Oil and Energy Department. *Page 4*

ELSTREE STUDIOS: Brent Walker, fast growing UK leisure group, and Tranwood Earl, small UK merchant bank, announced the formation of a joint venture which will purchase the famous Elstree Film Studios for £32.5m ($54.6m) in cash. Page 23

Exuberant Bush steals an opening march

By Lionel Barber in Washington

Bush: successfully fought off the 'wimp' accusations

THE US presidential campaign celebrates its traditional Labor Day launch today with Vice President George Bush enjoying a distinct edge over his Democrat opponent Governor Michael Dukakis of Massachusetts.

While the latest opinion polls indicate a dead heat, Mr Bush, after a summer of uncertainty, has recovered to project an exuberant self-confidence.

Mr Dukakis, whose once commanding lead in the polls has evaporated, is searching for a second wind.

All this could change in the next four weeks as voters begin to focus, many for the first time, on the election just nine weeks away. A common theme so far has been the volatility in the polls, which show up to 20 per cent of the electorate moving back and forth between Mr Bush and Mr Dukakis.

Today, Mr Dukakis will speak in Detroit's Hart Plaza, near Cadillac Square, in an appeal to the blue-collar voters whose loyalty to the Democrat party has proved fickle in the last two presidential elections. His running-mate, Senator Lloyd Bentsen of Texas, will join him there.

Every Labor Day event is staged for the TV cameras and here the Republican ticket has stolen a march. Mr Bush's youthful running-mate Senator Dan Quayle of Indiana, who is recovering from a sticky start, has booked the Statue of Liberty in New York Harbour, the same site as President Reagan used to launch his successful presidential bid in 1980. Mr Bush will campaign throughout California today.

So far Mr Bush has set a negative tone to the campaign. Having spent most of 1988 fighting off the "W" word – wimp – the Vice President has found a new voice: "He (Dukakis) is the governor who vetoed the mandatory sentencing for drug dealers. He opposes capital punishment for drug kingpins. He fought tooth and nail to keep that outrageous furlough programme that lets murderers, rapists and drug dealers out of gaol."

The Republican plan is to paint Mr Dukakis as a leftish liberal who is soft on crime, soft-headed on national defence and a soft touch on Federal spending – in other words, too big a risk to be entrusted with the presidency.

The withering attacks caught the Dukakis team flat-footed, a fact the Massachusetts governor acknowledged last Friday when, almost in desperation, he recalled his old confidant Mr John Sasso to a top campaign post.

Mr Sasso resigned 12 months ago when he admitted leaking a videotape to reporters which showed Senator Joseph Biden of Delaware plagiarising a speech by the British Labour Party leader Mr Neil Kinnock.

The return of Mr Sas-

Continued on Page 18

Dukakis: withering attacks caught his team flat-footed

Bangladesh appeals for aid as floods leave 25m homeless

By Our Foreign Staff

THREE QUARTERS of Bangladesh was yesterday said to be under water in what is thought to be the worst flood disaster in decades.

More than 500 people are reported to have been killed and 25m left homeless as a result of heavy monsoon rains which have brought relief to most of India but a catastrophe to low-lying Bangladesh at the mouth of the Ganges river.

Dhaka airport was reported to be closed and rail and road links within the country cut by the floodwaters which have covered millions of hectares of farm land.

President Hussain Mohammad Ershad appealed over the weekend for international relief in the face of a situation that he described as "grave". The floods, coming on top of existing economic and political problems, could pose a severe challenge to his regime.

Mr Ershad said the country needed 2m tonnes of emergency food aid and helicopters *to drop it to families who were* stranded.

He said the floods had submerged 50 of the country's 64 districts and destroyed 8m homes. Japan has so far promised Bangladesh the largest grant of emergency aid from among the developed countries. The Japanese yesterday said that they planned to give $13m in "interim flood relief". Pakistan, the US and Australia have already pledged $600,000 of aid between them, and Britain will be donating £500,000 ($840,000) in rice and cash.

The UN is calling for assistance to help deal with the crisis and its Disaster Relief Fund has launched an appeal. The Dhaka office of the World Health Organisation has already distributed $37,000worth of water purifying tablets and anti-snake venom.

There are fears, however, *that the scale of the disaster* will quickly widen. The Chief Representative of Unicef, the UN relief agency, in Dhaka has warned there could be a disastrous epidemic of water-borne *diseases* once the *flood* waters start to recede.

Relief agencies will be unable to get supplies to Dhaka in bulk while the airport runway remains flooded. One aid official has said the fate of thousands of people could depend on how long the airport remains closed.

Civil aviation officials in the capital say, however, that the airport will remain out of action for several more days.

The monsoon floods last July took a heavy toll on the country with the loss of 1,800 lives and 10 per cent of the nation's agricultural output. Those floods were described as the worst for decades, although in contrast with the current crisis, the airport remained open throughout.

In Britain, the relief organisation Oxfam will today review whether or not to raise an appeal for Bangladesh. The Charity has already sent £90,000 in aid to the region but a spokeswoman said yesterday that all charities would be facing difficulty dealing with a new *crisis so soon after* the flooding in the Sudan.

GrandMet raises bid for Irish Distillers

By Lisa Wood

GRAND Metropolitan, the UK drinks group, *last night* raised its bid for Irish Distillers to I£5.25 a share, I£1.25 higher than its original offer, after receiving Takeover Panel permission to improive its terms.

The new bid values the Jamesons and Bushmills whiskey distiller at I£332m ($475m).

The Takeover Panel took the unusual step of allowing GrandMet to increase its bid because of the prospect of a takeover offer for the Irish company from Pernod-Ricard, the French drinks group.

Pernod-Ricard has been meeting Irish Distillers shareholders all weekend and seeking their commitment to a possible offer of I£4.50 per share.

Pernod-Ricard, which on Friday *raised its stake in Irish* Distillers to about 5 per cent, wanted irrevocable acceptances to its proposed bid from over 50 per cent of shareholders before launching its offer.

Last night, as GrandMet announced its increased bid, Pernod-Ricard was still locked in meetings with FII Fyffes, the Dublin vegetable and fruit merchant which owns 20.04 per cent of Irish Distillers, and Irish Life, which owns about 9 per cent. Several smaller shareholders are understood to have given irrevocable undertakings to Pernod-Ricard on the basis of its proposed offer.

GrandMet launched its bid after the European Commission said a bid from a consortium of Guinness, Allied-Lyons

Continued on Page 18

Background, Page 19.

Singapore ruling party wins 61% majority in poll

By Roger Matthews in Singapore

SINGAPORE's ruling People's Action Party, headed by Prime Minister Lee Kuan Yew, won its expected massive general election victory at the weekend, gaining 61.8 per cent of the popular vote.

Although its share of the vote again declined, this time by just over 1 per cent compared with a fall of nearly 13 per cent in 1984, the PAP still won 69 of the 70 contested seats. With 11 constituencies unopposed, this gave the PAP a total of 80 seats in the new parliament against just one for *the opposition.*

Mr Chiam See Tong of the Singapore Democratic Party retained the seat he won for the first time in 1984 with an increased majority.

The opposition also came close to winning a number of other seats, most notably in the largest three-member consitituency of Eunos where Mr *Francis* Seow, the *former* Solicitor General, lost by just over 1 per cent of the vote.

Dr Tay Eng Soon, who led the winning PAP team, said if Mr Seow had triumphed it would have made Singapore the laughing stock of the world. Mr Seow was detained for 10 weeks earlier this year accused of cultivating US political support.

As in other countries which operate a simple majority electoral system, the opposition has to gather 40 per cent and more of the popular vote in order *to make a breakthrough* in parliamentary seats.

Thus although the opposi*tion parties together gathered* nearly 38 per cent of the vote they were not able to improve on their representation in parliament.

Despite the failure of the PAP to recover any of the ground it lost in 1984, Mr Lee said he was happy with the result, describing it as a very considerable victory and a vote of confidence in the younger generation of political leaders. But he considered that some voters were still somewhat simple and said that it was up to his younger colleagues to *educate the people about* democracy.

There was no clear indication from Mr Lee, who is 65 later this month, when he might step down from the premiership, or whether he intended to become the country's first elected president once the necessary legislation has been approved by parliament.

However, Mr Goh Chok Tong, the first deputy prime minister, said he believed he would be ready to take over the government within two years, adding that the electorate had given a clear mandate for the PAP to introduce legislation for an elected president.

One of the main opposition platforms during the camapign had been to urge the electorate to deny the PAP the two-thirds majority required for it to introduce constitutional changes.

Mr Goh is expected to start work almost immediately on drawing up his cabinet list

GE to attack UK jet engine market

By Lynton McLain in London

GENERAL Electric Company of the UK (GEC) is planning to break Rolls-Royce's monopoly as Britain's jet aircraft engine maker.

Ruston Gas Turbines, a subsidiary of the British GEC, has drafted a memorandum of understanding with General Electric (GE) of the US, the world's largest aero engine manufacturer, to produce complete GE power units in the UK.

Mr Brian Rowe, senior vice-president of General Electric, said yesterday that the working arrangements with Ruston would have worldwide implications.

Lord Prior, GEC chairman, said Lord Weinstock, the managing director of GEC, was handling negotiations with General Electric. "A second UK source of aero-engines would be one of the outcomes of a successful programme with General Electric," he added.

Two years ago Rolls-Royce and General Electric of the US pulled out of a joint "risk and revenue sharing agreement" signed in 1984, which involved each company taking a 15 per cent stake in the other's most efficient civil engines.

Ruston Gas Turbines already makes aero engine components for General Electric, and has several collaborative agreements with the US company involving industrial gas turbines, Ruston's main business.

The aero engine parts are for the General Electric GE38 family of small engines. GEC has a financial stake in the GE38 project and is paid according to the number of engines sold. GEC expects Ruston to get £25m ($42m) annual sales from the GE38.

The first complete GE aircraft engines likely to be produced by Ruston could be for a UK Ministry of Defence order for the new Anglo-Italian EH101 helicopter. At present Rolls-Royce has a near monopoly on MoD orders for military engines.

The GE engine, the T700 CT7-6, built in collaboration with Alfa Romeo Avio and Fiat Aviazione of Italy is in direct competition with the RTM 322 helicopter engine from the Anglo-French venture, Rolls-Royce Turbomeca in co-operation with Piaggio of Italy.

For North American military sales, Rolls-Royce Turbomeca has a licence agreement with United Technologies, the parent company of Pratt & Whitney, GE's main US competitor, to manage and market the RTM 322.

Ruston is primarly a producer of power generation equipment and has supplied gas turbine generating sets for several North Sea oil platforms.

UK foreign mail hit by walk-out

By Mike Smith in London

OVERSEAS bound mail from Britain was brought to a virtual standstill after staff in the Post Office's foreign section in London yesterday joined a nationwide series of strikes over the management's use of casual labour.

Mr Alan Tuffin, general secretary of the Union of Communication Workers, said that all the country's postal services could halt by mid-week unless progress was made in talks aimed at settling the dispute.

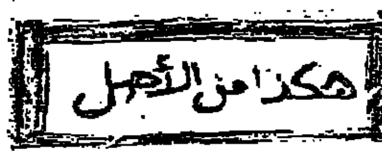
Last night about one third of the country's 140,000 staff in the post offices, letters and parcels divisions were on strike because they said that local managements had broken limits on the use of casual labour in their attempt to clear the backlog of mail resulting from last Wednesday's one-day national strike.

A walk-out yesterday by staff in the King Edward Street, London, sorting office, which handles three-quarters of UK mail going abroad, means that some 85 per cent of the Post Office's capacity for sending mail abroad is paralysed. The percentage of mail entering Britain has fallen even more sharply after a walk-out by staff at the Mount Pleasant sorting office in London which handles most incoming mail.

CONTENTS

THE MONDAY INTERVIEW

Mr A. Robert Abboud, the leading figure in this year's $1.5bn recapitalisation of *Houston's First City* Bancorporation, takes a great interest in other banks which do not behave as he thinks they should **Page 34**



OVERSEAS NEWS

BEREGOVOY INVITED TO VISIT FRANKFURT NEXT WEEK

Bundesbank set to flex muscles

By David Marsh in Bonn

THE BUNDESBANK, stung by criticism of its monetary policies this summer from the French Government, is inviting Mr Pierre Bérégovoy, French Finance Minister, into its den.

Mr Karl Otto Pöhl, president of the Bundesbank, has won agreement for the next meeting of the inter-governmental Franco-German Finance Council, on September 16, to be held at the central bank's headquarters in Frankfurt.

The Bundesbank, which raised its discount rate by half of a point to 3.5 per cent 10 days ago, is cautiously tightening its monetary policy to counter the weakening of the D-Mark and to quell inflationary pressures. These moves run counter to the desire of the new Socialist Government in Paris to cut French interest rates.

By hosting the third full meeting of the Council, which was set up at the beginning of the year, Mr Pöhl aims to underline to the French Finance Ministry that the Bundesbank, and not the Finance Ministry in Bonn, controls West German monetary policy.

The respective finance ministries hosted the first two sessions of the council this year, and it had been assumed that governments would be in charge of organising the body's meetings. The Bundesbank wants to drive home to the French, and to the Bonn Government, its view that the D-Mark's weakness is hindering the aim of cutting West Germany's huge trade and current account surpluses.

The Bundesbank believes that the sharp real (adjusted for inflation) depreciation of the D-Mark within the European Monetary System has been contributing to a potentially destabilising boom in West German exports within the EC this year.

West German exports to the rest of the Community rose by 9.4 per cent in the first six months of the year, compared with a rise in imports of only 3.6 per cent. Its trade surplus with the EC rose to DM39.2bn, against DM30.2bn in the first six months of 1987.

Although a realignment of EMS currencies looks unlikely in the near future, the rising trade imbalances within the EC are storing up considerable currency problems for the future, in the Bundesbank's view. As a result of the increases in West German exports to EC members, and of the lower increases in imports, bilateral German trade surpluses widened sharply in the first six months of 1988.

The surplus with Britain rose to DM10.2bn, against DM8bn in the first six months of 1987. The surplus in trade with France (not including aeroplanes) rose to DM9bn from DM7.9bn. The surplus rose to DM5.4bn (DM3.8bn) with Italy, to DM2bn (DM400m) with the Netherlands, and to DM5.5bn (DM4.4bn) with Belgium/Luxembourg.

The Franco-German Finance Council groups the finance and economy ministers, and central bank governors, from the two countries. It is intended to complement a Defence Council set up to increase military co-operation.

The Finance Council, however, has been regarded with intense suspicion by the Bundesbank, which sees it as an attempt by the French to interfere with the Bundesbank's autonomy in the monetary sphere, which is anchored in statute. This suspicion has not been allayed by France's efforts to tone down public criticism of the Bundesbank in recent weeks.

Walesa defends his decision to call for strikes to end

By Christopher Bobinski in Warsaw

MR LECH WALESA, the leader of Solidarity, yesterday defended his decision to call off strikes and go into talks with the Polish authorities in the hope of securing legal recognition of his union banned under martial law seven years ago.

Speaking to a crowd of some 5,000 in Gdansk after a service at the Solidarity stronghold of St Brigid's, Mr Walesa argued: "There is a chance for the first time in Poland to talk seriously about what can and should be done. I must seize this chance."

It was the first time the union leader had faced his supporters *en masse* since he had called for the strikes to end last Wednesday night, then had to argue bitterly with miners as well as shipyard workers to persuade them to drop their protests.

"Poland does not need strikes. I know that we need a struggle but it must be a struggle which does not turn against us," he told the crowd, which responded more warmly when the local priest, Father Henryk Jankowski, called on the Government to legalise Solidarity.

The authorities have said that round-table talks on "any subject" can start as soon as the latest strike wave, which began on August 15 in the Silesian coal fields, ended.

"I extinguished the strikes and I will extinguish any others that happen," Mr Walesa added as doubts began over his hold on the imagination of young workers who in the strikes of the past few weeks, have taken up the demand to have Solidarity recognised.

On Saturday morning, some 200 protesters at Manifest Lipcowy Colliery, the last remaining strikebound pit, emerged from the main gate, ending the stoppage after the authorities had promised not to victimise the strikers.

The day before, Mr Walesa had met with an angry response there when he arrived to put his case for an end to the strike. It was eight hours before he was able to prevail, as well as extract the no-victimisation clause from management.

In the past three weeks, at least 150 miners have been sacked in the area, over a dozen are under investigation for fomenting the strike, and many have been called up for military service.

In Szczecin on Saturday, port workers and bus drivers also dropped their protest in response to Mr Walesa's call.

Brezhnev son-in-law faces court today

MR YURI Churbanov, the disgraced son-in-law of the former Soviet leader Leonid Brezhnev, faces the Soviet Supreme Court today, in a multi-million-dollar corruption case expected to put the entire Brezhnev era on trial, Reuter reports from Moscow.

Mr Churbanov, 51, rose to First Deputy Interior Minister after marrying Brezhnev's daughter, Galina. He is accused of using his post at the top of the Soviet police establishment to take more than $1m in bribes. Eight other top police officers, all from Uzbekistan, will be in the dock with him. Together, they are accused of amassing several million dollars in bribes.

Soviet press accounts have described staggering corruption in Uzbekistan, a Central Asian cotton-growing republic where state farm workers, underground millionaires, police and Communist Party officials collaborated to cheat the state.

The press has made Mr Churbanov into a powerful symbol of the Soviet decline under Brezhnev.

Large-scale economic crimes are still punishable by the death penalty, but it is unlikely Mr Churbanov would face execution if convicted.

Le Pen jibe draws legal action

By George Graham in Paris

THE French Justice Ministry has begun proceedings against Mr Jean-Marie Le Pen, leader of the extreme right wing National Front, after he attacked a junior minister in terms that recalled his blunder last year in describing Hitler's extermination camps as a "detail of history".

Mr Pierre Arpaillange, Justice Minister, asked the public prosecutor in Mr Le Pen's home district of Nanterre to start proceedings for lifting the immunity given by his membership of the European Parliament and to charge him with "insulting a minister" under the 1881 French press law.

Mr Le Pen had called Mr Michel Durafour, a centrist who has joined the Socialist Government of Mr Michel Rocard as Civil Service Minister, "Durafour-crematorium," punning on the last syllable of the minister's name, which means "oven" in French.

After the ultra-right-wing leader's dismissal last year of the Auschwitz ovens as a detail, for which he was recently condemned by the French courts to pay symbolic damages to a group of former concentration camp inmates, the pun aroused a stream of protest yesterday from politicians across the political spectrum.

Even within the National Front, the remarks showed up the splits in the party since its failure in the legislative elections this summer, which left it with only a single member of Parliament.

Mr François Bachelot, Mr Le Pen's campaign manager in the presidential campaign earlier this year, said he was "profoundly shocked", while Mr Pascal Arrighi, former National Front MP for Marseilles, dissociated himself completely from the phrase.

Mr Le Pen's own philosophical roots lie more in France's withdrawal from Algeria than in the Second World War, but his party has often backed "revisionist" historians who have sought to minimise or deny the existence of the Nazi concentration camps.

And although Mr Le Pen says he himself fought in the French resistance to the German occupation, he has been associated with the publishing of Hitlerian texts and records.

Jean-Marie Le Pen at a Marseilles army monument

Serbian demonstration raises ethnic tension in Yugoslavia

By Judy Dempsey in Budapest

ETHNIC and nationalist tensions in Yugoslavia sharpened at the weekend after a mass demonstration by thousands of Serbs.

More than 65,000 of them marched at Smederevo, south of Belgrade, calling for action against the ethnic Albanians who live in the southern province of Kosovo, which is autonomous within the Serbian republic. They carried nationalist banners and shouted "we want weapons" and "send the army into Kosovo."

Kosovo was the scene of bloody nationalist riots in 1981. Ethnic Albanians, who make up 80 per cent of the population there, wanted the province to have the status of republic. The army was sent in to quell the riots.

Despite a heavy police presence since then in the province, which is Yugoslavia's least developed and poorest region, tension has continued.

Several thousand Serbs have migrated from the province, partly for economic reasons and partly because of alleged intimidation by ethnic Albanians.

In recent months, however, ethnic tension has taken on a new dimension through the policies of Mr Slobodan Milosevic, Serbia's Communist Party leader. He is proposing what are regarded as radical and potentially dangerous amendments to the Yugoslav constitution.

These would reduce the autonomy of Kosovo (and that of Vojvodina, the other autonomous province within Serbia), transferring responsibility for their external policy, security and judiciary to the Republic of Serbia.

The proposals have been opposed by several other republics, including the comparatively well-developed western ones of Slovenia and Croatia, on the grounds that Serbia would become a more dominant and stronger political force in the Yugoslav federation.

French budget plan for FFr10bn tax cuts

By George Graham

THE FRENCH Government has drawn up plans for tax cuts totalling about FFr10bn ($34m) in its budget for 1989, due to be presented this month.

The plans, agreed on Friday between Mr Michel Rocard, Prime Minister, and Mr Pierre Bérégovoy, Finance Minister, include reductions in value-added tax rates on a number of products and a cut in the rate of corporation tax which is applied to undistributed earnings.

The Government had decided earlier on an overall increase of 4.6 per cent in spending to FFr1,130bn, with a deficit reduced to FFr100bn and priority given to the education, employment and research budgets.

Stronger than expected economic growth this year, leading to increased tax receipts, still left room for between FFr10bn and FFr12bn of tax cuts.

Mr Bérégovoy said last week that he wanted to use this room to consolidate the financial position of French companies and for a number of measures of social justice, such as cuts in VAT.

Corporation tax is to be cut from the current flat rate of 42 per cent to 39 per cent for income which is reinvested. Mr Bérégovoy had proposed a bigger cut, to 37 per cent.

In the VAT sector, where France is under some pressure to reduce its rates so as to come into line with the rest of the European Community, the budget will cut the number of rate bands from five to four. The 7 per cent band — applied to items such as books, cinema tickets and public transport — will be abolished by cuts to the lowest current rate of 5.5 per cent.

Some other products may be moved from the standard 18.6 per cent band to 5.5 per cent, but no changes are expected in the two higher-rate bands of 33.3 per cent, applied to electronic equipment and luxury goods, and 28 per cent, applied to cars.

In addition, duties on lead-free petrol are to be cut by FFr0.20 a litre, though diesel taxes, for which an increase had been proposed by the Industry Ministry, are expected to remain unchanged.

Mr Bérégovoy has said he plans next year to undertake a more thorough overhaul of France's fiscal structure, simplifying and reducing the number of separate sectorial taxes and creating a fairer and more efficient tax system.

US airline wins legal round

By Anatole Kaletsky in New York

EASTERN Airlines won a preliminary round in its legal battle to reverse the Federal court decision last week which enjoined it against laying off 4,000 employees.

The US Court of Appeals said late on Friday that Eastern could start to lay off some of its workers, provided it posted a $4.7m (£2.8m) bond as collateral in the event that the unions won the full appeal hearing.

Eastern said it welcomed the decision, but did not know how it would proceed, pending the full hearing scheduled for Tuesday.

Chilean opposition groups stage mass 'no' rally

By Mary Helen Spooner in Santiago

CHILEAN opposition groups organised a mass rally in Santiago yesterday, calling for a "no" vote in the forthcoming October presidential plebiscite, in which General Augusto Pinochet is to be the only candidate.

The rally was the first huge anti-government gathering since the lifting of the state of emergency on August 27, and tested the strength of opposition to the 15-year-old regime, after pro-government forces held a demonstration in support of Gen Pinochet following his nomination last week.

A group of former regime officials calling itself Independence for Democracy issued a statement urging Chileans to vote "no" in the October 5 plebiscite.

The declaration said that, with the military junta's decision to nominate General Pinochet, the Chilean armed forces had lost an "historic opportunity" to consolidate their achievements and to work towards national reconciliation.

On Saturday, more than 5,000 people attended a rally supporting Gen Pinochet and a "yes" vote, at a sports stadium in eastern Santiago.

Italian exports up unexpectedly

By John Wyles in Rome

THE value of Italian exports leaped by a wholly unexpected 25.2 per cent in May, leaving the monthly trade balance showing a modest L325bn deficit compared with L1,435bn in May last year.

Delayed by a strike at Istat, the state statistical agency, the latest trade figures will only heighten perplexity about the Italian economy. The early months of the year appeared to show a flagging export performance and soaring imports puffed up by excessively strong internal demand.

However, the May performance places the growth in exports for the first five months of the year at 11.1 per cent, slightly above the 10.9 per cent rise in imports. Nevertheless, the five-month deficit of L7,454bn is ahead of the figure of L6,850bn a year earlier.

At L15,435bn, imports in May were 17.8 per cent above the Cif (cost, insurance, freight) value of a year before, while Fob (free on board) exports rose 29.2 per cent to L15,100bn.

Egypt, Jordan back new PLO Mideast moves

By Tony Walker in Cairo

THE leaders of Egypt and Jordan expressed strong support at the weekend for moves *in the Palestine Liberation* Organisation to fashion a new political programme to help solve the Arab-Israel dispute.

King Hussein of Jordan ended four days of talks with Egyptian President Hosni Mubarak before leaving for London, where he was due to discuss the latest Middle East developments.

The Jordanian monarch said on his departure: "We are waiting for the Palestinians to solidify their position so that we may offer support." Mr Mubarak said he had discussed with King Hussein ways in which *they could assist the* PLO.

Egypt is anxiously *monitoring debate inside the PLO* on the establishment of a provisional government, the declaration of an independent state in the occupied territories and the unveiling of a new political programme.

Egyptian officials are worried that disputes in the organisation might mar its attempts to gain international support.

A PLO official was quoted in Tunis as saying that the 451-member Palestine National Council — the Palestinian parliament-in-exile — would meet *in Algiers soon.*

Israeli trial of 'Soviet agent' may lead to tripartite spy swap

By Andrew Whitley in Jerusalem

AN ISRAELI businessman who made his fortune in the South African homeland of Bophuthatswana, Mr Shabtai Kalmanovitz, is to go on trial behind closed doors in Tel Aviv today on charges of spying for the Soviet Union.

The opening of the trial, more than eight months after Mr Kalmanovitz's arrest, has revived persistent speculation that a complicated tripartite spy swap may be planned, involving Israel, the Soviet Union and the US. If a deal is done and Mr Kalmanovitz is found guilty, the exchange could take place immediately after his trial ends.

According to security sources, the envisaged swap includes the deportation to Israel of Mr Jonathan Pollard, the US naval intelligence analyst whose arrest in the US in November 1985 badly strained relations between Washington and Jerusalem. The US never fully accepted Israeli pleas that the Pollard case — he was alleged to be spying for Israel — grew out of a rogue operation, subsequently disbanded.

The return of Mr Pollard and his wife, Anne, convicted of being an accessory to the crime, would be a great political coup for Mr Yitzhak Shamir, Israeli Prime Minister, before the general election in November. The Pollards are seen and their action has aroused considerable support among Israeli right-wingers.

The Shamir Government hopes to have two cards to play: Mr Kalmanovitz, who moved easily in the upper echelons of Israel's political and intelligence establishment, and a high-grade Soviet spy whose case, and whereabouts, the Government refuses to discuss. The latter has been identified by the West German magazine Die Welt as Professor Marcus Klingburg. An Israeli MP tried unsuccessfully to break official silence over the case in May. Israeli lawyers, privately confirm that the man was arrested and convicted at a secret trial, after being unmasked as a senior officer in the KGB.

So sensitive is the case that no mention of it has ever appeared in the usually vigorous Israeli press.

The Soviet Union is reported to be ready to complete the triangular negotiations — in which Mr Amnon Zichroni, the left-wing Israeli defence lawyer for Mr Kalmanovitz, is believed to have a key part — by freeing an unidentified American it holds. Mr Kalmanovitz, who was Bophuthatswana's trade representative in Israel as well as Sierra Leone's cultural attaché, has pleaded not guilty to charges of spying for Soviet intelligence and having contact with a foreign agent.

THE ISRAELI Cabinet held an angry debate yesterday over the use of firearms by Jewish settlers and Israeli soldiers against Palestinian stone-throwers in the occupied territories, Andrew Whitley reports.

However, Mr Yitzhak Shamir, Prime Minister, denied earlier comments by his aides that he favoured such use. The shooting dead of stone-throwers — often younger than teenagers — might be popular with part of the Israeli right, but such a policy would be bound to stir international condemnation.

Mr Shamir's backtracking came as a surprise, as the state-run television and all the newspapers yesterday had reported prominently that the Likud bloc's leader intended to press the divided coalition Cabinet for a widening of army regulations on opening fire.

Gulf talks to continue in spite of distrust

NO RECESS is planned in the the Iran-Iraq peace talks despite the distrust both sides say has prevented them from making progress, United Nations mediator Jan Eliasson said yesterday, Reuter reports from Geneva.

The two sides are so divided that the UN has not convened a face-to-face meeting since the second day of the talks, on August 26.

The Swedish envoy, chosen on Thursday by UN Secretary-General Javier Pérez de Cuéllar to take over Gulf mediation from him, said it was important to work hard to seek agreement on small issues in order to build confidence.

"We are now in this intensive working phase and I of course hope for and expect progress on the issues that we discuss," he told a news conference. "There is no recess planned for the time being."

Despite the problems, Mr Eliasson said: "I am not discouraged. You have to have a modest appreciation of progress. To me it's progress that both sides sit in a [separate] meeting, discuss problems of substance and characterise their meeting as business-like and constructive."

The Iraqi Foreign Minister, Mr Tariq Aziz, met Mr Eliasson for 75 minutes on Saturday evening and his Iranian counterpart, Mr Ali Akbar Velayati, later had a 2½-hour meeting with him.

Mr Eliasson said he and his team were digesting the detailed information from those talks.

Mr Aziz said the negotiations had not advanced past square one since they began on August 24.

They were stuck on the question of a ceasefire and a withdrawal of troops, the first point of UN Security Council Resolution 598, the basis for the talks.

● A British destroyer was holed on its port side and 11 crewmen were injured when it was in collision with a container ship it was escorting toward the Strait of Hormuz, the UK Ministry of Defence said yesterday.

The accident occurred on Saturday when the destroyer, HMS Southampton, and the British-registered Tor Bay were 15 miles off Fujairah on the Gulf of Oman.

● France said yesterday it was calling home its aircraft carrier Clemenceau as part of a cut in the fleet protecting shipping in the Gulf made possible by "new perspectives for peace", in the region, AP report from Paris.

Budapest criticised

ROMANIA accused Hungary's official media yesterday of denigrating the policies of President Nicolae Ceausescu, a week after a summit between the two countries, Reuter reports from Vienna. Romania's Communist Party daily, Scinteia, also said Budapest had cut living standards.

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Burma 'heading for bloodbath or a civil war'

By Richard Gourlay in Bangkok

BURMA could be heading for "a bloodbath or even civil war," Mr Stephen Solarz, chairman of the US House of Representatives subcommittee for Asian Affairs, said yesterday after meeting President Maung Maung of Burma in Rangoon.

This was a pressing danger unless the besieged ruling party agreed to meet popular demand for an immediate return to democracy, he added.

In an unusual 24-hour visit to a country in which the US has few direct interests, Mr Solarz met opposition figures and government leaders. However, he did not meet U Ne Win, who is thought still to be wielding power behind the scenes after 26 years of autocratic rule which ended when he stepped down formally in July.

"The future of Burma is likely to be decided in the next weeks," Mr Solarz said. "The only question is whether it will emerge peacefully or as the product of chaos and violence."

Since early August, Burmese people have taken over dozens of towns in a nationwide revolt against one-party rule.

Mr Solarz said he felt from his meeting with the president that the Government realised it did not have the people's confidence.

During a one-hour meeting and lunch with President Maung, Mr Solarz said he thought the leaders knew the people would reject the results of a planned party conference on September 12 that could lead to proposals for multi-party democracy, whatever was decided.

Opposition leaders have already called another general strike for Thursday, which they say will continue until the regime gives in to demands for an interim government, to be established before full pluralistic elections.

Mr Solarz's visit coincided with a lull on the streets of Rangoon and other cities, diplomats said, after weeks in which anti-government demonstrations and marches have brought the country to a virtual standstill.

Mr Solarz called on the governments of West Germany and Austria, countries which some Burmese leaders have visited recently, to consider providing asylum to any leader who wanted to flee the country.

He said that he would table a resolution in the US House of Representatives this week supporting a rapid transition to a multi-party system and calling on the Burmese Government not to use violence against its people. Diplomats believe that hundreds of people were shot dead by the army in demonstrations last month, in addition to at least 100 killed in the suppression of riots earlier this year.

Tutu urges Anglicans to boycott SA polls

By Jim Jones in Johannesburg

ARCHBISHOP Desmond Tutu yesterday called on Anglicans not to vote in South Africa's municipal elections – a call which he admitted was illegal.

The call puts him a direct confrontation with the Government, which has prohibited advocating an election boycott. In a sermon marking the installation of the first coloured rector of Cape Town's St George's cathedral, Archbishop Tutu urged white Anglicans to join black members of the church in not voting, adding that the Government was guilty of intimidation by wanting to force people to vote.

He said he was aware of the penalties for calling on voters to abstain, but told the congregation security could not be achieved "through the barrel of a gun, nor through the draconian and oppressive state of emergency, nor through bomb blasts".

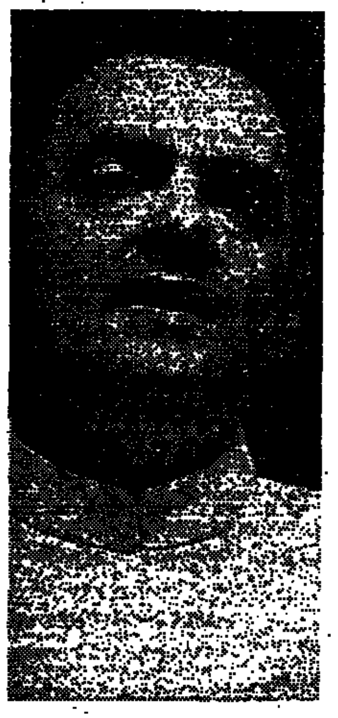
In recent weeks the Government has mounted an extensive advertising campaign designed to persuade black South Africans to vote in the racially segregated elections for local representatives. It is illegal to campaign against the elections and, inside South Africa, newspapers are forbidden from reporting boycott calls.

A high, though unspecified, turnout of voters in October is seen by the Government as necessary to endorse its claims that most black South Africans want to vote. Some 3m black South Africans are entitled to vote, about one eighth of the country's black population, and slightly more than 2m of these have been placed on the electoral roll. Restricted organisations, such as the UDF, are not allowed to nominate candidates.

POLITICAL OPPONENT ARRESTED FOR CONSPIRACY TO MURDER AS DISTRUST OF ADMINISTRATION GROWS

Gandhi in retreat over restrictions on newspapers

By David Housego in New Delhi



Rajiv Gandhi: conciliatory

MR RAJIV GANDHI, India's Prime Minister, beat a humiliating retreat yesterday in announcing that his government would delay controversial legislation that would have restricted investigative reporting by Indian newspapers on corruption scandals.

He announced this after intensive cabinet consultations over the weekend and in the face of rising criticism by opposition leaders, newspaper editors and lawyers. Even so, the postponement of the measure failed to satisfy journalists, who announced that they would go ahead with a demonstration today and a one-day strike tomorrow.

The Prime Minister's climbdown came as a fresh political controversy seemed to be blowing up over the arrest on Saturday of one of Mr Gandhi's key opponents on charges of conspiracy to murder.

Mr Sanjay Singh, a former minister in the state of Uttar Pradesh who runs the opposition campaign in Mr Gandhi's Amethi constituency, was charged with being behind the murder of India's former badminton champion. The case is grabbing national headlines.

Officials regarded Mr Gandhi's move over the prospective legislation as a conciliatory gesture, saying this was the first time a bill which had passed the National Assembly had been shelved before it was presented to the Upper House.

The Defamation Bill was to have passed through the Upper House today before being approved as law this week. It will be submitted instead to a ministerial committee headed by Mr P.V. Narasimha Rao, Foreign Minister, for revision.

Mr Gandhi proposed consultations with newspapers and journalists' organisations, saying: "Every suggestion will be taken into consideration." It was no part of the Government's intention to curtail freedom of the press, he added.

However, in the prevailing climate of distrust between the Government and the press, publishers' and journalists' associations yesterday demanded the withdrawal of the bill, before negotiations.

Journalists do not want to get drawn into discussing the revision of a measure whose fundamental aims they dispute.

Mr C.R. Irani, managing editor of The Statesman, who has acted as a spokesman for newspaper editors, said the Government "had not made a case why the legislation was needed". He said earlier reports by the Press and Law Commission had advocated liberalising the press, rather than imposing on it further restrictions.

Describing the bill as "conceived in fear, drafted in haste, and rushed through in panic", he said the Government's "record was so bad – double-dealing all the time – that entering discussions with it was unlikely to lead to an understanding that the bill should not be introduced."

The most controversial section of the bill provides for prison sentences for journalists who have wrongly implied that a person has committed an offence. This clause is seen as protecting members of the Prime Minister's circle named in corruption scandals.

The bill also provides for speedier trials and hearings in camera. It would make winning defamation charges against newspapers far easier.

The controversy over the bill is linked with the complex murder case involving Mr Sanjay Singh in that both are part of the distrust and suspicion that has built up against Mr Gandhi's administration.

Mr Singh claims that his arrest is politically motivated and publicly points the finger at Mr Gandhi. Mr Singh is a relative of opposition leader Mr V.P. Singh, whose victory in the Allahabad by-election in June he helped to organise.

Mr Sanjay Singh is accused of having hired gunmen to murder Mr Syed Modi, a former badminton champion of India. Police say he was having an affair with Mr Modi's wife.

The press have questioned the reliability of the police view and asked why Mr Sanjay Singh should jeopardise a promising political career by conspiring to kill somebody as famous as the badminton champion.

Soviet viewers telephone queries to Party meeting

A LOCAL Communist Party meeting in the Soviet city of Gorky was broadcast live on television on Saturday and viewers had a chance to phone in questions, in another first for the Kremlin's glasnost (openness) drive, Reuter reports from Moscow.

The Government newspaper Izvestia reported yesterday that a plenary session of the regional party committee, lasting several hours, was carried in full on a local television station in Gorky, about 500km east of Moscow. Around 50 people rang in with questions and proposals during the session, the newspaper said.

"We hope that the discussion of burning problems in the presence of the people and with the help of television will become a standard of party work," said Mr I Chapanov, a senior executive of the Gorky regional party committee.

However, the newspaper did not say whether there were any plans to extend the experiment to higher-level party meetings, which are generally held behind closed doors.

Parts of the national Communist Party conference, which started in late June, were broadcast, albeit in edited form.

Peace returned to Burundi says president

BURUNDI'S President Pierre Buyoya says peace has returned to the central African nation where thousands of men, women and children were reported massacred in tribal feuding, Reuter reports from Nairobi.

Mr Buyoya said in a broadcast: "I would like to reassure all Burundians and tell them that peace has returned to the country." He warned against rumour-mongering and said: "There is no reason for anybody to leave their homes and property because of fear,"

About 60,000 refugees have fled to neighbouring Rwanda.

China links bank account interest rates to inflation

CHINA'S central bank will tie interest rates on savings deposits to inflation in a move to quell bank runs and panic-buying caused by rising prices, AP reports from Peking.

The official Xinhua News Agency said yesterday that the People's Bank of China would provide subsidies that would bridge any gap between interest rates and the price index.

It said the measure would take effect on Sept 10 and apply to three, five and eight-year savings deposits. Xinhua said that the subsidies would be given only to individuals. Collectives that tried to transfer their deposits to individuals would be fined.

On Sept 1 commercial banks raised interest rates for time deposits, with rates for a three-year deposit going from 7.2 per cent to 8.64 per cent, still well below the consumer inflation rate of 19 per cent registered in June.

Sharp rises in prices, and rumours that the Government would lift the prices of more items, have led to runs on banks, hoarding and panic-buying. Xinhua said yesterday that the Industrial and Commercial Bank of China told branches not to refuse withdrawals by depositors.

Olympics liquor ban lifted

OLYMPIC athletes will be free to toast victories or drown sorrows now that Games Village authorities have lifted a liquor ban, Reuter reports from Seoul.

Foreign team officials complained after security guards confiscated liquor some American and Dutch athletes tried to smuggle into the village. The ban was lifted hours later.

The French were particularly pleased. They have already arranged for three truckloads of wine to be delivered for their team members.

Planeloads of athletes and officials are arriving daily for the Games, which open on September 17.

Pakistan eases newspaper law

PAKISTAN'S caretaker Government yesterday lifted a 25-year-old law which gave authorities sweeping powers over the printed press, Reuter reports from Islamabad.

Mr Illahi Bakhsh Soomro, the information minister, said that it would be replaced by a new ordinance with restricted powers which would be made public shortly. The 1963 Press and Publication Ordinance gave the Government enormous powers to ban publications or specific issues and impose pre-censorship. Though rarely used in recent years, it was widely resented by Pakistani journalists.

Scores 'die of hunger daily in south Sudan'

SCORES of people were dying of hunger every day in one south-western town in the Sudan, Aweil, a Sudanese army officer said yesterday, and a Khartoum newspaper reported 8,000 people had died there so far, Reuter reports from Khartoum.

Officials said hundreds of destitute people were seeking food in towns which had little to offer. More than 30 people a day were dying in one such town, al-Meiram.

"Refugees arrive with barely any clothes on, carrying only water gourds," one relief official said after visiting al-Meiram in the province of Southern Kordofan.

The military commander of Bahr al-Ghazal, Major-General Abugroun Abdullah Abugroun, was quoted as saying the same number of people died of hunger in the province's town of Aweil every day as were killed in northern Sudan by floods last month.

"The state is concerned with the north and ignores the south," he told the newspaper Sawt al-Sharia. "The fuss over 64 people dying in the north in floods proves it."

The Khartoum daily al-Ayam quoted reports saying 8,000 people had died in Aweil.

Lange supporter defeats left wing in party poll

THE moderate parliamentary wing of New Zealand's governing Labour Party completed defeat of its left wing at the weekend with the election as party president of a candidate preferred by Mr David Lange, the Prime Minister, AP-DJ reports from Wellington.

Ms Ruth Dyson beat Mr Jim Anderton, a left-wing candidate, by 574 votes to 473 at the party's annual conference.

This compounded the success of the parliamentary wing on Friday, when it defused a confrontation with the union-dominated left wing by promising to consult party members more on policy.

Mr Lange committed the Government to consult the party more extensively on such contentious measures as privatisation of state businesses, but he made clear that the Government would not be bound by the party.

Mr Anderton had refused to vote for the budget, which included plans to sell more state assets. His defeat confirms the supremacy of free-marketeers in the Government.

Financial markets had been concerned that the free-market economics ministers in the Government might be pressured at the conference to change some of their economic policies.

But a move at the conference to ban privatisation of state enterprises was defeated by nearly two to one.

Ms Dyson's election as party president followed an address to the conference by Mr Lange, in which the Prime Minister backed free-market policies of Mr Roger Douglas, Finance Minister but promised a more measured approach.

OVERSEAS NEWS

Competition lawyers strike a bonanza in Brussels

Corporations fear an increasingly tough line on merger control regulation, **William Dawkins** reports

BUSINESS is booming for competition lawyers in Brussels. The reasons are fundamental to anyone who plans to do more business across European frontiers in the run-up to 1992 and the EC's free market.

The lawyers' anxious corporate customers are experiencing twinges of panic over the European Commission's increasingly tough and, they fear, decreasingly predictable, line on competition rules.

The latest trigger for their worries is the Commission's success in breaking up the three-company consortium bidding for Irish Distillers (IDG), on the grounds that it was illicitly trying to carve up the European drinks market.

That worked for the Commission for unusual reasons but is seen as a political move by Brussels to strengthen its hand in winning member-states' agreement to a controversial EC-wide merger control regulation.

Business lobbyists like the idea of such a regime, but only so long as it really sets clear rules for those launching takeovers, mergers and joint ventures, as they are likely to do increasingly in the approach to 1992.

Lobbyists fear that application of the scheme, now being extensively re-drafted by Brussels to try to satisfy its critics, might be muddled and bureaucratic in practice.

The Commission has intervened in recent months in several other highly sensitive takeovers, such as that by British Airways of British Caledonian. The crucial point, though, is that those interventions came through long negotiations after the completion of the deals.

What is so unusual about the IDG case is that the intervention came before the deal was done, which is what would happen under the proposed regulation. Also sensitive was the wrangle about British Aerospace's takeover of Rover, though the argument there was over state aid rather than monopolies.

Nobody doubts that the tougher competition policy is here to stay, whether or not Mr Peter Sutherland, the Irish Commissioner who has done much to raise the profile of Brussels in this area, keeps his post when the Commission's new term starts at the turn of the year.

The Commission is no longer afraid, as it often seemed to be only a few years ago, to hit big targets. What is more, its decisions are having a wider impact on the development of specific markets, such as telecommunications, electronic banking, transport and insurance.

"A few years ago, the Commission was using competition policy just as a policing exercise, to stop people from doing bad things. Now it is taking on a new life, to try to bring about the coherent development of fragmented European markets," says Mr Jean Russotto, managing partner in the Oppenheimer law firm's Brussels branch and competition expert for the American Chamber of Commerce in Belgium.

Commission officials vehemently deny they are guilty of industrial *dirigisme* but one admits: "In the IDG case we took a clear view that we did not want the market sewn up among competitors."

That decision is in revealing contrast with the Commission's ruling only last year to allow Britain's ICI and Italy's Enichem to pool their loss-making polyvinyl chloride (PVC) operations to make Europe's largest PVC producer. They got away with carving up

The Commission is no longer afraid, as it often seemed to be, to hit bigger targets. What is more, its decisions are having a wider impact on the development of specific markets

their market, whereas the IDG consortium bid failed, because the chemicals deal brought badly needed restructuring to a market creaking with surplus capacity.

Anybody who fails to understand how competition rules are developing could be in for some nasty shocks in 1992. Unlike most of the single-market programme, this is one of the few areas where Brussels has almost supreme power, being able to crack down on infringements without the constraints of having to consult member states. The only control is via appeals against Commission decisions to the European Court of Justice in Luxembourg.

The Treaty of Rome, the EC's constitution, allows Brussels to ban any kind of market sharing arrangements or abuse of dominant positions (under Articles 85 and 86), and to fine wrong-doers heavily.

Brussels can also force the repayment of state subsidies likely to give the recipients an unjustifiable advantage over competitors – a sanction it has used with unprecedented force recently.

Last year, Brussels ordered EC Governments to reclaim Ecu 747m (£493m) of illicit state aid – an enormous increase on the Ecu 11m repaid in 1986. It was remarkable work for a unit with a staff of 30, fewer than those assigned to administering state aid in Wallonia, the southern region of Belgium. Fines against the corporate members of illegal cartels have also risen rapidly, from Ecu 12.7m in 1985 to a record Ecu 60m a year later.

The increase is partly due to a rise in the number of complaints from competitors and customers wronged by anti-competitive practices, and partly thanks to more Commission vigilance. Mr Sutherland justifies his tough stance on the grounds that unchecked abuses of competition will distort markets all the more, once restrictions on free trade have been scrapped.

Therefore, Mr Sutherland argues, it is necessary to regulate to create a free market – though many question whether the Commission is getting the balance right.

There is a wider reason for the Commission's increasing activity in competition policy. As the general trend towards market deregulation gathers pace, so does cross-frontier EC trade, the rules of which are enforced by Brussels. That means the job of setting and umpiring rules for such as price structures and tendering procedures shifts from the old national regulatory bodies to the Brussels competition authorities.

To extend its competition powers to cope with its more important role, Brussels is making use of rarely tried legal tools and new procedures. These include the wider use of block exemptions, whereby

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otherwise anti-competitive agreements get blanket legal backing so long as they observe specific rules set by the Commission.

These already exist for exclusive distributorship accords and patent licensing agreements. Draft block exemptions for know-how licensing and the booming franchise industry are expected to become law within the year.

If agreed by Governments, the merger control regulation would be by far the biggest extension of the Commission's competition powers in recent years, though many officials argue that it is only refining what they can already do under the rules. The UK is the only member-state unable officially to accept the merger scheme, though other EC Governments are known to have reservations over some details.

Nobody doubts the desirability of an EC system for vetting cross-frontier mergers before the event rather than after, as is mostly the case now. Industry's main fear is that the distinction between the powers of the Commission and those of national anti-trust authorities will be unclear.

One worry is that mergers given the go-ahead in Brussels might still run into trouble at home. Another worry is that the Commission will be unable to react quickly enough to the more than 200 mergers it expects will be covered by the regulation each year.

The Commission's most controversial recent competition action, in political terms, is its surprising use of the little-known article 90 of the Rome Treaty. This allows Brussels to issue directives on its own account, rather than going through the usual process of seeking member states' consent for new laws, in cases where public monopolies are harmfully distorting free competition.

The Commission did this during the summer with a directive to enforce free competition in the Ecu 9.5bn telecommunications terminal equipment industry. This is now being challenged by France in the European Court.

Commission officials continue to deny that all this amounts to the sector-by-sector creation of an industrial policy manipulated by Brussels, but some governments, especially those of France and West Germany, are uneasy.

The signs are that the issue of how far member states want competition rules to be developed will become an ever hotter discussion point in the months ahead. The outcome will be crucial for companies' flexibility of manoeuvre in the internal market.

Japanese 'must start taking initiative in basic research'

By Ian Rodger in Tokyo

JAPAN has enjoyed a "free ride" in basic research, and must now start to take the initiative in research in new areas such as materials, biotechnology and electronics, according to a white paper published by an agency affiliated to Japan's Ministry of International Trade and Industry (Miti).

The report, by the Agency of Industrial Science and Technology (AIST), said Japanese products were world leaders in 36 of 40 technology-intense product categories. However, the country lagged far behind the US and western European countries in basic research.

Japan's purchases of technology from abroad have gradually declined from 10 per cent of total research and development spending in 1971 to 3.1 per cent in 1986, but overseas sales of Japanese technology have scarcely budged from 2 per cent of total R&D spending in 1971 to 2.7 per cent in 1986.

The report attributes Japan's failure in basic research to a very low level of government funding. It calls on the government to provide much greater support in this area.

Government R&D spending in Japan accounted for 19 per cent of total R&D spending in 1985, when the comparative figure in the US was 46.8 per cent, in the UK 42.6 per cent, in France 53.5 per cent and in West Germany 39.6 per cent.

The report also says Japan's higher education environment was woefully insufficient to support serious basic research. It found that Japanese technology was at a high level in only a few sectors where there was strong commercial interest, such as semiconductor lasers, solar energy, high-tensile steel, video recorders, memory chips and microbiology.

Japanese companies were found to be among the biggest R&D spenders in the world, spending an average of 2.6 per cent of sales on it. However, Japanese technology was low in satellite rocketry, aero-engines and electro-magnetic scanning, and very low in data bases.

Absenteeism on rise in Sweden

By Robert Taylor in Stockholm

SWEDEN is suffering an increase in industrial absenteeism through a change last December in the sickness benefit system, which now enables workers to secure 90 per cent of their earnings from first day they are off work.

The Government estimated in its 1988 budget that the reform, introduced to help disadvantaged workers in the private sector who lacked the kind of sickness compensation achieved by union bargaining in the public services, would add SKr3.5bn (£317m) to the annual sickness benefit expenditure. This was expected to total SKr27bn for 1988 but now the total looks like being more than SKr31bn.

Before the reform in sickness benefit, workers received no cash compensation from the state as a legal right for the first day they were away from work.

The average daily level of sickness absenteeism this year among industrial workers in Sweden amounts to 16-17 per cent of the labour force, with an absenteeism rate of 4 per cent for those in white-collar occupations.

According to a recent survey carried out by the leading employers' organisation in Sweden, SAF, the country suffers far more from industrial absenteeism than other industrialised countries. Last year, the average Swedish worker took off 27 days for sickness, compared with 11 in Britain, 16 in France and 18 in West Germany.

In a survey published last week in the country's leading business newspaper Dagens Industri, it was revealed that the daily absence through sickness at Volvo's Gothenburg plant was running at 17 per cent, at Saab Scania's Sodertalje plant 16 per cent, and at Trelleborg's main plant 20 per cent.

The public sector is also suffering high rates of sickness absenteeism. The average daily figure among the workforce for Stockholm city council, for example, was an extraordinary 40 per cent in 1987 and is reported to be not much less this year. Industry believes that there has been a clear upward trend in the absentee totals during 1988.

Both the ruling Social Democratic Party and the main trade union organisation (LO) want to reduce the amount of time employees are supposed to spend at work. In its general election campaign, the party is promising to bring in a new law that would give everybody six weeks holiday on near full pay.

Industry estimates the cost of that reform would add between SKr15bn and SKr20bn to employers' bills.

Opinion polls favour Social Democrats

SWEDEN'S ruling Social Democrats look set to win more votes than the non-socialist bloc in the September 18 general election, but may be forced to rely on the Greens in forming a government, according to national opinion polls, Sara Webb reports from Stockholm.

The polls conducted by Sifo and IMU, show the Social Democrats winning between 44.9 per cent and 42.3 per cent respectively of the vote while the non-socialist parties would win between 41.1 per cent and 39.2 per cent.

The Social Democrats won 44.7 per cent of the vote in 1985 and have relied on the communists for a majority in parliament.

The latest polls show the communists falling short of the 4 per cent needed to win seats, while the Green party looks set to enter parliament.

SHIPPING REPORT

Tankers taken up at bargain rates

By Kevin Brown, Transport Correspondent

TANKER CHARTERERS were able to cover their requirements at bargain levels last week as brokers reported "miserable" trading conditions for owners in all the major loading areas.

E.A. Gibson, the London shipbrokers, said rate levels continued to drift for virtually all sizes of ships in the Gulf.

Two small VLCCs were fixed to the East towards the end of the week at Worldscale 36.

There was a higher level of inquiry for ships of about 80,000 tons deadweight, but the large number of available vessels caused rates to move down to about Worldscale 80 for Eastern destinations.

Galbraith's, the London shipbrokers, said several vessels had been fixed from West Africa, but rates did not move; owners were trading at about Worldscale 53 for cargoes of 125,000 tons for discharge in north-western Europe or the US.

There were few inquiries for clean tonnage in the Mediterranean. One charterer seeking to move 23,500 tons of gasoil from Cagliari to Fos was said to have received 13 firm offers before covering at a lump-sum rate of $82,500.

The dry cargo markets were dominated by Soviet business.

Denholm Coates, the London brokers, said Soviet charterers had taken six Panamax vessels for transatlantic round trips at about $9,250 per day.

They were also seeking, more importantly, Panamax and smaller "handy-size" bulk carriers up to mid-1989, and standard Panamax rates moved up from about $10,000 to $11,500 within two days.

Portugal loses 40m work days in first half

By Diana Smith in Lisbon

PORTUGAL lost 40m work days through absenteeism, in the first half of this year, by its wage-earning population of 3.5m people.

The buoyant growth of investment and jobs Portugal has enjoyed since 1985, with unemployment falling from 10.5 per cent to 6 per cent, might be expected to lead to less absenteeism.

However, Mr Luis Felipe Pereira, State Secretary for Social Security, revealed this week that, from March through June, absenteeism grew by 35 per cent. This could not be allowed to go on, he declared.

The government is tracking down people who defraud employers and social security for months or even years, through doctors' or psychiatrists' certificates attesting to physical or mental inability to work, meanwhile often collecting salaries and benefits.

Doctors (but not yet psychiatrists) must now put an assigned code number on all certificates. Computers can thus detect chronic absentees and institute a check on whether an illness is feigned.

Sociologists believe Portuguese absenteeism is rooted in weak education, low wage levels and erratic labour relations, in a land of companies directed paternalistically rather than managed.

Employers owe Es 120bn (£461m) to the social security – much of it money deducted from wages. Few companies offer pension schemes. After 35 years of work and contributions, the average Portuguese now has a monthly state pension of Es13,000 (£50).

Statoil deal talks resume

DISCUSSIONS between Statoil, Norway's state oil company, and Himont, the US-based polypropylene subsidiary of Italy's Ferruzzi-Montedison, are continuing after being halted earlier this year by the Norwegian Oil and Energy Department, Karen Fossli reports from Oslo.

The talks are aimed at establishing a joint venture to build a NKr1.4bn polypropylene facility in Antwerp, Belgium. Statoil and Himont agreed last September to construct the Antwerp facility but the deal foundered when Statoil withdrew. Talks resumed but halted again.

There is a sense of urgency for the two to secure the deal, to avoid exclusion from Europe's rapidly expanding polypropylene market.

Himont and Statoil intend to produce 150,000 tonnes of polypropylene annually in the first phase of the Antwerp project, with tentative plans to expand capacity by 300,000 tonnes.

Statoil sees the new project as a way to further strengthen its petrochemical activities. It needs the authorities' approval by spring if it is to participate in the Himont project.

WORLD ECONOMIC INDICATORS

FOREIGN EXCHANGE RESERVES (US$m)

	June '88	May '88	Apr. '88	June '87
US	10,793	10,912	11,275	13,902
UK	37,274	38,513	38,364	25,395
W. Germany	59,434	65,778	68,177	56,320
Japan	81,304	80,738	80,366	63,952
Belgium	7,455	7,897	7,797	6,919
Netherlands	12,980	14,144	13,828	12,089
Italy	24,836	24,580	25,507	20,661
	May '88	Apr. '88	Mar. '88	May '88
France	28,286	27,970	28,050	28,436

Source: IMF

Trades Union Congress meets in Bournemouth

Appeals for unity rejected as union leaders gather

By Philip Bassett, Labour Editor

LEADERS of the EETPU electricians' union yesterday refused last-minute appeals to follow TUC instructions and withdraw from two no-strike, single-union agreements.

The executive council's decision means the union will be expelled from the TUC today at the opening of its annual Congress in Bournemouth – precipitating the most serious split in British trade union history.

The EETPU's expulsion would be likely to signal the start of an inter-union membership recruitment battle and bring closer the possibility for the first time in Britain of an alternative organisation to the TUC.

A final attempt to prevent the expulsion will be made by Mr Bill Jordan, president of the AEU engineering union, the EETPU's closest union ally. He is expected to challenge the decision of the TUC's governing general council to recommend that the EETPU be expelled for refusing to accept the findings of two TUC inter-union disputes committees, which ordered the electricians to withdraw from two agreements.

Mr Jordan will argue that the option of continuing the EETPU's current suspension from the TUC should be put to the Congress. But leaders of the AEU and EETPU accept privately that the move will not succeed, and that the EETPU will face expulsion.

Following a meeting of the electricians' executive in Bournemouth, Mr Eric Hammond, the union's general secretary, said he fully expected his union to be expelled today. While he said the electricians had not turned their backs on compromise, he said: "I just can't see one at present that would fit the bill."

The EETPU considered both a compromise proposal from Mr Jordan, who put it to Mr Hammond in a telephone conversation yesterday, and an appeal to think again from Mr Norman Willis, TUC general secretary.

Mr Willis insisted there was no question of the TUC's compromising. Its Bridlington principles – rules under which unions undertake not to "poach" members from other unions – had to be complied with.

But Mr Hammond said the electricians' executive had nothing concrete to consider. "I reported to them what people were saying but they didn't find anything in that to make them change their principled position," he said.

One immediate result of the EETPU's expected expulsion will be pressure for the opposition Labour Party to take similar action against the union. Mr Neil Kinnock, party leader, will indicate the party's position on the issue when he speaks tomorrow to the Congress, though the position was eased considerably yesterday when Mr Ron Todd, general secretary of the TGWU transport union, said he thought the arguments for spreading the TUC's decision to Labour were on weak ground.

TUC report criticises electricians' defiance

By Our Labour Editor

THE TUC says that the conduct of the EETPU electricians' union "amounts to a deliberate, and continuing, refusal to accept the TUC's authority" in a special report on the union prepared before today's expected expulsion of the union from the TUC.

The reason for the union's likely expulsion is its refusal to accept two binding rulings of the TUC's inter-union disputes committee. The committee resolves rows between unions by implementing the regulatory principles agreed by the TUC at its 1939 conference at Bridlington.

TUC officials insist that the disciplinary action against the EETPU is not about its controversial strike-free, single-union deals, but about the much narrower question of discipline within the trade union movement.

Indeed, TUC leaders claim that it is irrelevant to the question whether the agreements to which the two rulings relate – at Orion Electric in South Wales, and at two depots of Salstream, a subsidiary of the Christian Salvesen distribution company – are strike-free deals at all.

The TUC's 27-page report, published yesterday, does say, however, that the so-called Bridlington principles are central to the TUC's role and purpose. "Anything other than a mandatory requirement on unions to observe the outcome," it comments, "would rapidly bring the machinery into disrepute."

Insisting that the EETPU is refusing to accept the TUC's authority to regulate relations between unions, the report says that "there is no indication that any future disputes committee awards would be accepted and implemented by the EETPU."

The TUC rejects the lesser penalty of a continued suspension of the union, saying that "if the EETPU had provided any inclination that it would accept the awards and sought a reconciliation on anything other than its own terms," then the TUC would seriously have considered such an option. But it says "there have been no conciliatory gestures."

Recommending expulsion, the report says that the EETPU's refusal to be bound by the same rules as other unions "raises legitimate concerns about the risks of aggressive EETPU organisational activities, unrestricted by the constraints of the TUC's disputes principles and procedures and with other unions denied any form of redress."

The report concludes that "so long as the EETPU is unwilling to co-exist in association with all other affiliates within the TUC, sharing equal rights and responsibilities one to the other under the rules, they have, in effect, divorced themselves from the TUC."

The EETPU - General Council's Report to Congress. TUC, Congress House, Great Russell Street, London WC1B 3LS. £2.

Ferranti cordless telephone plea

By Terry Dodsworth

SIR Derek Alun-Jones, chairman of Ferranti, the UK electronics group, wants British Telecom and Mercury to be barred from operating cordless telephone services of the type Ferranti plans to launch later this year.

In a letter published in the Financial Times today, Sir Derek also argues that delays in granting licences for the cordless system could damage Ferranti's prospects after its heavy investment in pioneering the technology. The issue of common operating standards should not be used to delay the launch of the service, he says.

Because the system has to use the telephone networks run by either British Telecom or Mercury, Sir Derek argues that these two companies would have an unfair competitive advantage if they were also given licences for the cordless service.

He adds that the cellular telephone service companies owned by Racal and British Telecom – which runs the Cellnet system in co-operation with Securicor – should also be excluded from the cordless market.

Sir Derek's comments coincide with a detailed study of the licensing question by the Department of Trade and Industry and the Office of Telecommunications, the regulatory body for the telephone industry.

Four front-runners have emerged as potential cordless system operators, but Ferranti claims that it has a substantial lead over its competitors.

The new generation of cordless telephones is being promoted as a cheap alternative to cellular mobile car phones for individuals who want to use their personal telephone while on the move.

Subscribers will be able to carry the cordless handsets around with them, making calls from a number of public locations where the handset will link into the conventional wired telephone system through a radio link with a base station.

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Better deal for staff on Grand Met poll

By John Gapper

GRAND Metropolitan Retailing has revised job structures and improved benefits for part-time workers after almost two thirds of its staff said in an attitude survey that they could barely live on their present income.

Despite dissatisfaction with pay and benefits, the company found that most bar and catering staff enjoyed their work, and many wanted more opportunities to progress within the company.

Junior staff gained most satisfaction from the social aspect of their jobs – working in teams and mixing with customers. Although they rated their managers highly, they thought the company's internal structures impeded them.

The survey, carried out last December, is one of a number being carried out by companies to test staff attitudes. GMR does not recognise unions nationally and believes only about 10 per cent of staff are union members.

The company, which owns the Berni and Clifton Inn chains and Chef and Brewer public houses, employs about 33,000 people. About 2,000 completed questionnaires and a further 200 were interviewed by a communications consultant.

GMR is among the hotel and catering employers pressing for the abolition of the Licensed Residential Establishment and Licensed Restaurant Wages Councils, which set minimum pay rates for 27,000 of its staff.

Although it pays 66 per cent of its staff above minimum rates, it argues that wages councils are impeding it from creating a flexible pay structure that would allow it to give its staff more incentives to provide good service.

As a result of the survey, the company has made a number of innovations in employment policy. They include:

- A five-day course in communications and personnel management for pub and restaurant managers, which teaches them how to get the best out of staff.
- An increase in the number of assistant manager posts in its 1,850 establishments to provide staff with more promotion prospects.
- The introduction of junior supervisor posts within each pub or restaurant, known as Staff Leaders. They have some responsibility for training and earn 25 pence an hour more than other junior staff.
- Giving part-time staff benefits previously confined to those working 16 hours or more per week. They now get discounts, and qualify for pension, life assurance and sickness pay schemes.
- Introducing incentive schemes based on prizes for staff voted by their colleagues to have given the best service to customers.

Mr Alan Wild, director of employee relations and communication, said the survey had shown the company that it was attracting staff who valued their jobs and wanted their efforts to be recognised tangibly.

Paying benefits to part-time staff enabled the company to reward them more highly without falling foul of the threshold for national insurance payments, which meant that many did not want to earn more than £42 a week.

The company is to carry out a further survey of employee attitudes next year to test whether it has managed to improve its standing among its staff.

FT's £70m investment programme sees printing move to London docklands

PRINTING of the UK editions of the Financial Times today moves to the FT's new printing plant in London's Docklands, the culmination of a three-year £70m investment programme.

New £10m presses mean much higher quality reproduction of both text and photographs and make possible a greater use of colour in both advertising and editorial.

They will also allow an increase in maximum pagination, enabling further expansion of the FT's news and statistical coverage.

In preparation for this, the London FT has followed the International edition in being split into two distinct sections, with surveys forming a third section when they appear.

The latest Rockwell Goss Headliner web offset presses give the FT run-of-press colour for the first time, although the main editorial use of colour is likely to be in graphs and charts. The insetting of pre-printed colour will continue.

The seven unit presses enable the FT to print 56-page papers compared with the 48-page limit of the old presses at Bracken House in the City of London. An eighth unit is already on order and there is room for a ninth. This will make 72-page papers possible.

The plant is also to be equipped with the latest inserting equipment – machinery that can insert everything from pre-printed sections to brochures and company reports at the same speed as the printing presses.

The £70m investment includes the cost of the front-end electronic editorial system introduced over the past year and the cost of more than 400 voluntary redundancies in the production departments as well as the the new printing plant in the old East India Docks.

The new plant is being operated by about 200 people compared with 650 under the old system.

"It's the largest development in the history of the FT," said Mr Frank Barlow, chief executive of the Financial Times.

Further details about the FT's new plant can be found in a wide ranging survey of developments in printing technology which appears as a third section of today's paper.

Ford announces end to cheap car sale finance

By John Griffiths

UK CAR MARKET leader Ford has told its 1,100 dealers that it is ending its cheap car purchase finance schemes, regarded as the industry's most successful sales-boosting ploy, on September 15.

Ford's action, prompted mainly by the increased cost of maintaining them through a period in which base rates have risen by 4.5 percentage points, is expected to be greeted with relief by principal rivals such as Vauxhall, Rover and Peugeot Talbot, which are likely rapidly to follow suit.

However, there are signs that the move may also have been influenced by Ford's increasing unease on two other fronts: the Government's concern over the consumer credit explosion and the significant role being played by new car imports in the UK's gathering balance of payments crisis.

As the UK's clear market leader, with its share of nearly 30 per cent almost double that of its nearest rival, Ford in the past few weeks has become uncomfortably aware of just how big its contribution to this year's car imports bill is likely to be.

So far this year the share of its UK sales taken by cars built in its British plants is down to about 57 per cent, about 10 percentage points lower than last year. Its target is 75 per cent.

Even if Ford were to increase its UK sourcing to 60 per cent for the full year, in a 2.2m market and with a 27 per cent share Ford would sell about 240,000 imported cars, around 11 per cent of the total market and equivalent, for example, to all Japanese car sales combined.

Ford can claim many more export offsets than either Vauxhall or Peugeot Talbot - a high volume of Transit van and engine exports among them.

However, in a speech at the end of last week to fleet operators, Ford UK managing director Mr Roger Humm placed heavy emphasis on the 65,000 vehicles - commercials as well as cars - Ford says it lost in UK strikes earlier this year.

He added: "Even those manufacturers with the foresight to maintain investment and capacity levels (in the UK) through the early 1980s are now finding that demand is outstripping all forward projections, with the result that their *production levels have yet to* catch up with their order book."

Taken together, Ford's finance scheme move and Mr Humm's remarks indicate that Ford itself will not be too sorry to see UK new car demand slow down somewhat if it helps to ease the motor industry's own balance of trade problems as a political issue.

At his meeting with dealers, Mr Humm said the cheap finance schemes had become simply too expensive to sustain.

Their withdrawal, announced at the launch of revised versions of Ford's Escort, Orion and Sierra ranges, means that the era of very cheap finance, subsidised jointly by the manufacturer and dealer, is over, said Mr Humm.

Throughout this year, cheap finance has been proving a spectacularly successful way of boosting sales in the UK. Mr Humm told the dealers that even allowing for the possibility of a final quarter slowdown, nearly 2.2m cars should be sold in the UK this year, a record for the fourth year in a row.

According to Ford, roughly half of private motorists buying its cars used the cheap finance schemes in August.

NHS review may make 'drastic proposals'

By Michael Cassell, Political Correspondent

MR KENNETH CLARKE, the Health Secretary, yesterday indicated that the current review of the National Health Service might bring "fairly drastic" proposals for improving its performance.

The suggestion will raise expectations that the review, being conducted by a small group of ministers under the chairmanship of the Prime Minister, will produce radical plans for modernising the health service.

Mr John Moore, who was the Cabinet minister responsible for the NHS before the July reshuffle, had repeatedly indicated that the review would not lead to any policy overhaul. The intention, he emphasised, was to mastermind change by evolution rather than by revolution.

Yesterday, however, Mr Clarke indicated that he expected the review to point to the need for "big steps" to improve the NHS record of patient care.

He said he expected the review to be completed in the autumn and it is widely expected that he will use his address to the Conservative party conference in October to provide the first details of its conclusions.

Mr Clarke, who emphasised that he was a "keen enthusiast" for the NHS, said that to turn it from "a ramshackle bureaucracy into a well-run business" delivering patient care and treatment, required big steps, which the Government was ready to take.

He said he was particularly anxious to overcome weaknesses in a system which, in spite of the injection of massive and rising amounts of public finance, saw some health authorities run out of cash, with harmful consequences for patients.

Mr Clarke also defended the Government from accusations that it was refusing to abide by its commitment to fund fully the recent pay award for nurses and other health service workers.

He said the unions had been party to the clinical regrading exercise on which the pay award had been based.

King defends Ulster security forces

By Michael Cassell, Political Correspondent

MR TOM KING, the Northern Ireland Secretary, yesterday defended the activities of the security forces in the province after the shooting last week of three IRA men in County Tyrone.

The shootings provoked widespread suggestions that the army was deploying the Special Air Services Regiment (SAS) to operate a "shoot to kill" policy in Northern Ireland and there have been several calls for a full investigation into the latest deaths.

Mr King said yesterday there was only one "shoot to kill" policy currently in force and that was being carried out by the IRA. "They go out and murder without scruples. Their policy is to shoot anybody, shoot first and shoot often."

He praised the courage and skill of the security forces and said that the three IRA men who were killed near Omagh had constituted "a particularly nasty murder gang" with long criminal records behind them. There had been no question that they were out to kill and that the security forces had acted "absolutely correctly" to prevent more killings.

Mr King said he understood the IRA men had opened fire first in the exchanges that had ended in their deaths but there would be a full investigation to establish that the security forces had maintained the high standards of conduct expected of them.

Mr King also said moves were under way to arrange a meeting with Irish ministers to discuss the latest violence and measures intended to step up the fight against terrorism.

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SAS to face a courtroom battle

Peter Bruce reports from Gibraltar on the forthcoming inquest

BRITAIN's ferocious war with the Irish Republican Army moves to a tiny Gibraltar courtroom tomorrow when the inquest begins into the killing in Gibraltar last March of three unarmed IRA terrorists by the SAS.

The three, Mr Sean Savage, Ms Mairead Farrell and Mr Daniel McCann, were shot dead leaving the colony. A car bomb they were thought to have left behind was later found, unassembled, on the Costa del Sol. Some witnesses to the shooting claimed they were shot *while trying to surrender.*

The inquest has assumed great political importance in the UK and among some of its allies, notably the US, coming as it does in the wake of a bloody summer in Ulster and growing claims that the British Government is operating an *unspoken "shoot to kill"* policy against terrorism.

In neighbouring Spain, which collaborated in tracking the three before they were shot, the inquest is also likely to arouse keen interest and will take some of the shine off an official visit to Madrid by Mrs Margaret Thatcher on September 22, the first to Spain by a British prime minister.

All seven SAS soldiers involved in the shooting, and probably British intelligence officials directing the operation, are likely to appear at the inquest. They will be screened from the public and the press and the court building has been made ready for any possible IRA reprisals.

Security elsewhere in Gibraltar is not particularly noticeable and were it not for the tragedy involved, much of the inquest would have about it an almost theatrical air.

Inside the neat, humid courtroom loaned to Gibraltar's Coroner Mr Felix Pizzarello for the inquest, he and 11 local jurors face an enthralling battle for their sympathies between the Crown counsel and representatives of the victims' families.

Mr John Laws, a senior Treasury counsel, will lead the Crown case in the inquiry. Brilliant, sometimes almost arrogant, he frequently troubleshoots for the Government in national security and delicate civil cases and is known as the Treasury devil.

Mr Laws' brief is to keep the inquest focused as narrowly as possible on the shooting and to divert questions of policy and intelligence-gathering.

To back him up he has a former soldier, Mr Michael Hucker, who is representing the seven SAS men.

Mr Hucker has served with the British forces in Northern Ireland and made his legal reputation in courts martial in West Germany. He now has private chambers in London and is considered an expert on ballistics. Mr Hucker is likely to be aggressive in his questioning of witnesses who claim they saw some of the victims trying to surrender.

Ranged against them is a gentle, white-haired Belfast solicitor, Mr Patrick (Paddy) McGrory, who will be hard to *hear even in the small court*room. As counsel for the victims' families it will fall to him to ask all the difficult questions.

Because the inquest can only return one of three verdicts – justifiable homicide, unlawful killing, or an open verdict – Mr McGrory's questions will centre on, in legal terminology, what was in the minds of the soldiers when they shot the three.

Legal opinion on what constitutes justifiable killing is, naturally, divided, but Mr McGrory is likely to want to delve deeply into the information (perhaps even into the way it was collected) being fed to the SAS men by British intelligence.

Mr Pizzarello's inquest compromise – that although the SAS men would have to attend, its scope would be held in check – will take some of the heat off the government lawyers. However, the eloquent Mr McGrory is unlikely to let much be hidden by colourful cries of "foul."

Any result other than justifiable homicide could do great *damage to Britain's efforts to* win American support for its policies in Northern Ireland. The US media are in the colony in considerable force for the hearing.

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Private mail carriers kept busy

By Lisa Wood

PRIVATE carriers of mail reported strong business this weekend as businesses and industry sought to beat the postal strike.

TNT Express UK, a subsidiary of TNT, the Australian transport company, said it had doubled the volume of business it normally carried at this time of the year, with private letters joining the more usual freight of parcels and documents.

On Tuesday TNT will be meeting the Department of Trade and Industry to discuss its application for a competitive licence in order to compete *with the Post Office for ordi*nary letters.

At present, because of the 1981 Post Office and Telecommunications Act, TNT and other private carriers have to charge substantially more than the Post Office.

Mr Alan Jones, managing *director of TNT Express,* described the meeting with the department as "vital."

Throughout the country, companies have been making plans for the private carriage of mail with carriers bringing in extra staff and lorries.

Companies warned of the possibility of cancelled and lost orders because of the strike.

One publishing company with many overseas customers said: "Our foreign customers are not calmed when we say there is a strike in the UK."

The aged, disabled and job*less are the victims in the UK,* according to the Federation of Claimants Unions.

Mr Percy Shelley, of the federation, said: "The failure of the Department of Social Security to respond to the after-effects of last Wednesday's strike has meant misery for thou*sands this weekend."*

Mr Shelley said Department of Social Security Offices had refused on Friday to replace undelivered Giros for people whose cheques had not arrived by the weekend.

Sports Aid has launched an emergency operation to beat the postal disruption which is threatening entries for next week's charity fun run for needy children.

More than 2,000 banks will issue entry forms to ensure applications do not get buried among strike-bound letters.

Football pools are not expec*ted to be badly affected as most* punters return their coupons to collectors who do not use the Royal Mail.

Littlewoods, which receives about three-quarters of the pools business, said only 2 per cent of its coupons were delivered by post.

Retailers want to see tax-free shopping for tourists extended

By Maggie Urry

RETAILERS are asking Customs and Excise to extend facilities for overseas tourists in the UK to buy goods tax-free. Mr Richard Weir, director-general of the Retail Consortium, which represents retailers, is asking for a meeting with Customs and Excise officials to put the traders' case.

His move follows the decision by BAA, which operates seven airports in the UK including Heathrow and Gatwick, to ask for Customs and Excise approval for a scheme based on a central London duty-free shop. Other operators are also thought to be looking at opening duty-free shops in tourist locations in the UK. Such shops are common around the world, although not in Europe.

The BAA shop, which would be run by its subsidiary British Airport Services in conjunction with Duty Free Shoppers, would allow tourists to order goods free of duty (in the case of cigarettes and alcohol) or VAT, and collect them at the airport after going through customs and passport control.

At present, tourists can reclaim VAT on purchases after leaving the country, but the procedure can be cumbersome. Duty-free goods are bought only when shoppers are "airside" at airports or physically out of the country on airliners or ferries. British Airport Services believe tourists would prefer to shop in a "downtown" store and would spend more if they were *not* hurrying for a flight.

Mr Weir says that retailers are not hostile to BAA's moves into retailing but he hopes that any changes in the procedure for dealing with VAT are made available to all retailers.

He would like to see VAT refund points at BAA's airports so that tourists could collect refunds in cash on goods bought from ordinary shops rather than waiting for cheques to be sent to them once they get home, and then paying commission when the cheques are cashed. British Airport Services is also asking Customs and Excise for permission to operate such desks and hopes for an answer by the end of the year.

Tourist Tax-free Shopping, the UK subsidiary of a Swedish group that operates a VAT refund scheme for tourists in most European countries, estimates that £400m of VAT is reclaimed each year by tourists in the UK.

It already operates a VAT refund desk at Newcastle ferry terminal and desks on DFDS ferries. TTS says refunds are often spent immediately in airport or ferry shops.

Brokers opt for BZW deal system

By Alan Cane

A COMPUTER system devised by Barclays de Zoete Wedd, the Stock Exchange market maker, to process small share orders automatically is proving a success in the London stock market.

Called Trade, and developed in conjunction with the stock processing bureau NMW Computers, the system was launched two months ago. Already, BZW says, it has nine firm agreements to take the system from both London and country brokers, and a further 12 provisional orders.

The Bank of England has just given permission for gilts to be included on Trade and BZW is extending the list of equities handled from alphas and betas – the most traded shares – to the low-volatility gamma stocks.

Stockbrokers that have concluded firm agreements with BZW include the Northern consortium Allied Provincial and the Manchester-based firm of Henry Cooke, Lumsden.

Small-order processing systems are seen as the principal way in which stockbrokers can cut the cost of dealing in small parcels of shares for private clients, which inevitably cost proportionately more in "back office" accounting than do large share deals.

Systems such as Trade involve an electronic link between broker and market maker. Deals are entered only once, through the keyboard of a personal computer. After that, trading is automatic, the deal being struck at the current best price and confirmations of the trade being sent electronically to the broker's and the market maker's own back office.

The International Stock Exchange is in the final stages of developing its own small-order execution system, Saef, with which Trade will be seen to be competing.

Originally Saef was to be introduced some time between November 1988 to January 1989, with a likely date of November 28. Now the Exchange says that final systems testing of the Saef software should be complete in the middle of October when it will set a firm date for release.

BZW claims its system is more comprehensive than Saef and will cost less *than the* Stock Exchange system.

Successful retail route set out

By Maggie Urry

SUCCESS IN retailing depends *neither on an entrepreneur's* gut feel nor on highly formal strategic planning systems, according to a survey by Peat Marwick McLintock, the retail management consultancy group.

Mr Henry Quick, general manager of Peat's retail consultancy group, said: "Long-term planning is a prerequisite for success but it does not have to be the formal variety as long as people get the right information about the company and its markets and analyse that information."

He said many successful retailers were led by a personality, usually someone with entrepreneurial flair who could also be autocratic.

Peat interviewed executives of 10 retail companies it saw as successful.

The companies approached planning in one of three ways:

- **Comprehensive, formal,** *strategic planning procedures:* Four of the 10 used these methods – Sears, W. H. Smith, Woolworth Holdings and Argos, part of BAT Industries. W. H. Smith has used strategic planning for many years; the others were recent converts.
- **Less formal procedures:** Four adopted such methods – Argyll, Dixons, Ratners and Tesco. Dixons has no planning department.

Ratners said it had "never *followed* a strategic *planning* process and has not, to date, produced a written, long-term, strategic plan."

The four focused on operational issues, such as property, distribution and systems. Peat said top management in these relatively undiversified companies was closer to their business than top management inothers.

- **Financial planners:** Ward White and Storehouse were so *described. Peat said Ward* White "represents the financially led acquisition variety of company that has relatively little interest in the operational aspects of its business."

Mr Quick said the key to successful planning was to avoid making the plan or procedure a special event. Rather, dialogue between planners should be encouraged.

Peat said retailers were increasingly recruiting managers trained to decision-making. Analytical skills were replacing gut feel.

Dr Mike Smith, Argos chief executive, said: "The *degree of* gut feel required has to be as a consequence of inadequacy of research and analysis."

Mr Quick said retailers did little to encourage creativity, although "success in retailing is almost always linked to innovation."

Pressure for 6-lane M40 link

By Kevin Brown

THE GOVERNMENT is being pressed by businessmen in London and Birmingham to drop plans to save £4m by restricting the "missing link" section of the M40 motorway to four lanes.

The Transport Department says traffic projections do not justify the extra cost of providing six lanes between Waterstock and Wendlebury, south of Oxford.

That view is strongly criticised in a joint letter to Mr Paul Channon, the Transport Secretary, from Mr Tony Platt, director of the London Chamber of Commerce, and Mr John Warburton, director of the Birmingham chamber.

The letter says the M40 is likely to develop as an alternative to the M1 as a direct link between London and Birmingham, and that would cause traffic to exceed Transport Department forecasts.

Single market 'doomed' without monetary union

By Ralph Atkins, Economics Staff

UNLESS European governments *agree to converge* economic policies, the creation of a single market from 1992 "is doomed to end in disaster," a leading securities house says.

The full benefits of a single European market will not be realised without monetary union, says a report by Prudential-Bache Capital Funding (Equities).

It argues that the liberalisation of capital movements in Europe will be necessary if all the advantages of 1992 are to be forthcoming. Producers would not be able to trade freely across borders if they *could not pay or receive* payments for goods.

It also says a fixed exchange-rate system is necessary and describes the current European Monetary System as a "halfway house" towards monetary union.

However, it says the twin *aims of a fixed exchange rate* and freely mobile capital are incompatible with monetary independence between countries. That means that a move towards monetary union is necessary, although a limited degree of fiscal independence may be retained.

The report says a "one-step move," introducing a common currency and central bank, would be "grossly unrealistic."

Instead, it says the most practical way to achieve union would be for governments to work towards convergence of economic policies so currency realignments would become smaller and less frequent.

It says: "Unless governments bury the hatchet and accept that economic convergence is the only solution, the 1992 project is doomed to end in disaster."

Plans for more city colleges expected

By Michael Cassell

THE Government is shortly expected to announce plans for more city technology colleges.

The first CTC is scheduled to open next week in Solihull, West Midlands; two others in Nottingham and Middlesbrough will take students from September next year. Four others have been announced.

Mr Kenneth Baker, Education Secretary, defended plans for 20 CTCs, funded by the private sector and specialising in technical training. Details of further colleges might emerge at next month's Conservative Party conference.

UK NEWS: FARNBOROUGH INTERNATIONAL AIR SHOW

UK aircraft constructors announce £386m orders

By Michael Donne, Aerospace Correspondent

ORDERS WORTH a total of more than $650m (£386m) for UK-built aircraft were announced at the Farnborough International Air Show, which opened yesterday.

Australia and the UK ordered a total of 19 Type 146 regional jet airliners worth more than $400m from British Aerospace; the British Ministry of Defence and South Korea ordered more than $200m worth of helicopters from Westland of Yeovil, Somerset; and the United States and the *Philippines provided new contracts* for Short Brothers of Belfast.

Many other UK equipment and engine suppliers share in the deals.

Many more orders are expected to be announced *at the air* show this week, where more than 600 of the world's aerospace companies are gathered *at the biggest Farnborough* show yet held: more than 350,000 people are expected to have visited by the time it closes on Sunday evening.

Such orders are often announced at Farnborough but are the result of months – even years – of negotiations.

The underlying trend in the world aerospace business is one of expansion. The business is expected to amount to almost $2,000 bn by the end of the century, covering civil and military aircraft, missiles, engines, space hardware and equipment and components of all kinds.

At *Farnborough this year*, the most significant new civil aircraft on display is the US McDonnell Douglas "propfan" aircraft, demonstrating a new fuel-efficient engine that has failed to win airline orders but which its *makers* believe will eventually dominate the world's short-haul airliner market.

Short Brothers of Belfast, the government-owned aerospace company being offered for privatisation, is disclosing details of its proposed FJX 44-seater twin-engined jet commuter airliner. British Airways was said yesterday to be very interested.

Boeing of the US, the world's largest builder of jet airliners, is expected to announce details today of a new version of its 767 twin-engined wide-bodied airliner that would be capable of long-distance non-stop flying on routes where passenger traffic did not justify use of larger aircraft.

On the military side, the *Soviet Union is stealing the* show with its Mig-29 Fulcrum combat aircraft – the fighter that the European Fighter Aircraft is being developed to counter.

Although this aircraft has *been in service for some time*, its appearance at Farnborough indicates the Soviet Union's *desire to* win wider *acceptance* of its aircraft industry among countries outside the Warsaw Pact.

Westland to sell Lynx to S Korea for £118m

By Our Aerospace Correspondent

WESTLAND Helicopters of Yeovil has beaten international competition and is to supply Lynx helicopters to South Korea. At *Farnborough* the company said it expected to receive a so-called "effective contract" soon.

The number of helicopters involved was not disclosed, at Korean request, but the order is believed to be for about 20, worth some $200m (£118.8m) to Westland, with other work for UK companies, including Ferranti and Rolls-Royce.

The order represents a double first for Westland: it is the first time Westland has sold to Korea and the first Lynx helicopter sale in the Far East. Further, it is the largest defence contract between the UK and South Korea.

South Korea is buying the Super Lynx helicopter for naval duties. The deal involves transferring UK technology to Korean industry.

Yesterday Westland also announced a £32m deal with the Ministry of Defence to supply to the British Army the Mk9 battlefield version of the *Lynx helicopter*.

Westland will initially build 16 of the helicopters. A further contract is expected, to modify eight army Lynx helicopters, already in service, to the Mk9 standard.

The orders from South Korea and the ministry will help to fill the company's order gap before the EH-101, Anglo-Italian, multi-role helicopter, under development, comes into full production.

Government to keep land stake

By Paul Cheeseright, Property Correspondent

THE GOVERNMENT is to retain a continuing financial interest in the development and exploitation of an aviation and business park to be run by the Carroll Group on 50 acres of land at the Royal Aerospace Establishment in Farnborough, Hampshire.

That breaks the normal pattern, established in a lengthy programme of surplus land disposals, of outright sale for a one-off payment.

Up to now the Government has shown a marked preference for reducing state involvement in business.

The Carroll Group was selected in 1986 by the Ministry of Defence to operate Farnborough as a civil airport and to develop in conjunction with *that* an aviation and business park to provide 726,400 sq ft of commercial space.

Subsequent negotiations between the Carroll Group, the Ministry of Defence (as landowner) and the Treasury on the financial arrangements to cover the project led to an agreement in three parts under which Carroll would pay the Government:

- A flat annual fee instead of payments for individual aircraft movements;
- A capital sum for the 125-year lease of the general business part of the park where there will be 493,050 sq ft of space;
- A percentage of the rental revenue from the 233,350 sq ft of space in the general aviation sector of the business park – this also the subject of a 125-year lease.

Carroll said no figures have been disclosed for these payments but they had been taken into account in its estimate that spending on the development would be £120m over seven to 10 years.

It is the third part of the agreement, reached in spite of Treasury opposition, that marks the change in government practice and gives the Ministry of Defence a continuing stake in the commercial success of the park.

In the negotiations the Treasury evidently held out for a single capital payment from Carroll and no continuing role in the project for the Ministry of Defence.

The outcome of the negotiations suggests that some government departments are prepared to follow the example of state agencies such as urban development corporations in sharing the profits of private-sector property developers.

Recent land sales by the London Docklands Development Corporation to property companies have contained clauses that provide for payments related to the completed value of developments built on the land.

The Teesside Development Corporation has made clear that it will take an equity stake in developments on its land.

The agreement between the Government and Carroll Group follows a practice adopted by local authorities concerned to increase their income.

Newcastle City Council, for example, has a joint venture with Capital & Counties to run the Eldon Square shopping centre.

Manchester City Council has recently established a property development company with the *Manchester Ship Canal Company*.

Soviet transporter aborts first takeoff

THE WORLD's largest transport aircraft, the Soviet Antonov An-124 Condor, weighing 405 tonnes, aborted its first public takeoff at the Farnborough International Air Show yesterday afternoon only seconds after starting its takeoff run.

A small explosion was heard as the aircraft began to move. The pilot abandoned the takeoff run and continued to roll very slowly towards the end of the runway.

Airbus Industrie to decide on enlarged A320 at end of year

By Michael Donne

AIRBUS INDUSTRIE, the European airliner manufacturing group, expects to take a formal decision around the end of this year on developing an addition to the Airbus family, *the stretched* version of the A320, seating 185 passengers.

Mr Jean Pierson, president of Airbus, said at the Farnborough International Air Show yesterday that the company was preparing a report for its supervisory board, which comprises representatives of its British, French, West German and Spanish partner companies. *The report* would be ready at the end of this year with the hope that the board would take its decision early in 1989.

The stretched A320 is intended to meet the demands of airlines that want a bigger version of the successful A320, *which seats 150 passengers*. Sales of the A320 to date amount to 319 aircraft.

Mr Pierson *also* said discussions with McDonnell Douglas of the US on possible collaboration between them were still in progress, but there would be no early announcement.

The stretched A320 is *one* of several projects under discussion for possible collaboration, and the fact that Airbus itself is now poised to go ahead with that venture may help to accelerate any agreement between the two companies.

Mr Pierson also said that with firm sales to date of 811 Airbus models of all types, it was *planned to raise* production to between 15 and 20 aircraft a month by the early 1990s to meet an expected annual turnover of around $12bn (£7.12bn).

Mr Pierson also said total sales amounted to 20 per cent of the world market for jets with more than 130 seats, and that he hoped the Airbus group, including its partner companies, would show profits on the Airbus venture by 1995.

Ministers delay talks on US

By Guy de Jonquieres, International Business Editor

MINISTERS from the four governments involved in Airbus – Britain, France, West Germany and Spain – have been forced to postpone a meeting scheduled for the Farnborough air show this week to discuss the dispute with the US and to review plans for reorganising the Airbus programme.

The US, which has strongly objected to European government aid to Airbus, recently gave a warning that it would consider taking trade sanctions if the programme were given any further state subsidies.

However, the meeting has been put off until early October because Lord Young, Britain's Trade and Industry Secretary, is in Australia. His visit there was arranged before he took over responsibility for the aerospace industry as part of a recent Cabinet reshuffle.

In May the ministers pledged to implement by the end of this year a report by four independent "wise men" on ways to increase Airbus's efficiency. The report said the programme must be given a stronger management structure and made more commercial.

It said that unless the changes were made urgently, Airbus might founder on uncontrollable losses, which have been aggravated by the weakness of the dollar, the currency in which aircraft sales are priced.

However, several of the companies involved are believed to be resisting the report's proposals which, they fear, would require them to surrender power to the Airbus Industrie consortium in which they are shareholders.

Airbus Industrie, based in Toulouse, is responsible for Airbus sales and marketing, but not for production. Aérospatiale of France and Deutsche Airbus of West Germany, a subsidiary of MBB, each own 37.9 per cent of Airbus Industrie, British Aerospace 20 per cent and Casa of Spain 4.2 per cent.

BAe chief hits at McDonnell Douglas

By Lynton McLain

THE RELUCTANCE of McDonnell Douglas to give up its aircraft control technology and accept modern technology is the main obstacle holding up a link with the European Airbus Industrie group, Sir Raymond Lygo, the managing director of British Aerospace, said yesterday.

"The problem with McDonnell Douglas is that it will not accept modern fly-by-wire control technology," he said. "If it did, it would not sell any more of its existing airliners such as the MD-80, which does not *have the advanced electronic* controls that are standard on the latest Airbus, the A320."

He said that unless there was a change in the attitude of McDonnell Douglas, Airbus could not link with it.

British Aerospace has run into some of the industrial and financial effects of the success of the Airbus programme.

"We are starting to produce sets of wings for Airbus at the rate of up to 20 sets a month. We are moving almost the whole company's aircraft production from two-shift to three-shift working. At the same time, cash flows are emerging as the capital employed to meet the accelerating Airbus order book rises, giving a cash flow problem until the aircraft are delivered."

- British Aerospace yesterday announced yesterday orders for a further 19 BAe 146 regional jet airliners valued at more than $400m (£237m), Professor Roland Smith, chairman of British Aerospace, said.

The Australian-based TNT worldwide transport group ordered 11 of the freight model. Air UK ordered two BAe 146-300s for its expanding route network. Six further orders were for unannounced operators.

Rolls-Royce goes ahead with high thrust jet

By Michael Donne

ROLLS-ROYCE, one of the world's "big three" jet engine builders, is now fully committed to developing its new higher-thrust L model of the RB-211-524 engine, and will build it even if the company does not win government launch aid for the venture.

Rolls-Royce has asked the Government for £100m in aid, about a third of the estimated overall development cost of about £300m.

So far, there has been no government response, but detailed technical and financial discussions continue, and Rolls-Royce is confident that support will be forthcoming. If it is, it will be repayable through a levy on sales.

The need for Rolls-Royce to press ahead with the L engine, which will have a power output of 67,500 lb and above, was confirmed at the air show yesterday by the announcement of General Electric of the US that it had decided to develop a competitive engine, the CF6-80 E1, of 65,000 lb thrust and upwards.

Such "super-power" engines are needed to power the forthcoming generation of bigger and heavier airliners, such as the 335-seater short-to-medium-range Airbus A-330, and bigger versions of the long-range Boeing 767 twin and the three-engined McDonnell Douglas MD-11.

Pratt & Whitney, which has a big engine of its own, the PW-4000, has yet to announce a bigger-thrust version but is expected to do so this coming week.

Short may ask for £83m aid for FJX

SHORT BROTHERS, the state-owned Belfast aerospace company the Government wants to privatise, is expected to ask the Government for up to £83m in launch aid for the proposed Short FJX, a 40-plus seat, twin-turbofan airliner, Mr Roy McNulty, the company's managing director, said yesterday.

The company is in the final stages of the design of the proposed commuter and feeder airliner.

UK NEWS

Threat to divert £180m order for waste ships

By Kevin Brown, Transport Correspondent

A LONDON businessman who wants to order up to 150 ships from British Shipbuilders' Sunderland yards, which face closure, plans to offer the contract to Harland and Wolff, the Belfast shipyard, if the Government refuses to accept his conditions.

Mr Alex Copson, the inventor of a revolutionary new class of waste disposal ships, has asked the Government to hand over North East Shipbuilders' two yards without charge and pay the 2,300 workforce for up to 18 months.

However, he has undertaken not to seek subsidies for the ships from the Government's Shipbuilding Intervention Fund. At an estimated contract price of $100m (£59.5m) a ship, that would save the taxpayer up to $28m a ship.

Mr Copson said he would switch the order to Harland and Wolff if his offer for NESL was rejected by the Government, and intervention fund subsidies would then be sought to build the ships.

If Mr Copson's claim to have identified a potential market of up to 150 ships was proved correct, the cost in intervention fund might reach $4.2bn, although subsidies are not guaranteed.

NESL, which has no orders, has been put up for sale by the Government as part of the break-up and privatisation of British Shipbuilders.

The NESL yards face closure unless a private-sector buyer is found by the end of September.

Mr Copson plans to use NESL to build a fleet of technologically advanced "bucket ships" which would dump dredged spoil, sewage and other waste in the virtually inert waters of the deep Atlantic.

Under his proposals, NESL would be run by a new company, Copson Shipbuilding. The orders would be placed by a second company, Global Pollution Control International. Both companies are controlled by Mr Copson.

Mr Copson plans to apply on Tuesday to the Ministry of Agriculture, Fisheries and Food for a licence to use the ships under the terms of the dumping conventions of the International Maritime Organisation.

However, there is some doubt about whether it is technically possible for the ministry to award licences before the deadline for bids for NESL, at the end of this month.

Mr Copson said he would ask the ministry to issue a temporary licence, if necessary, in order to allow the project to go ahead.

His proposals, which are strongly backed by the shipbuilding unions, were given added support by Mr Jim Slater, president of the National Union of Seamen and a leading Greenpeace activist.

Mr Slater said the bucket ships were significantly more sophisticated than existing waste disposal vessels and would help to cleanse the shores of industrial countries of pollution.

Relentless tread of shoe imports

Alice Rawsthorn on why the footwear industry is feeling the pinch

AT 10AM on Friday, Lambert Howarth summoned the workforce of its Lancashire footwear factories to announce its first big round of redundancies since the recession of the early 1980s.

For the last year or so, the £885m UK footwear industry has been battling against an influx of imports. Until now the cuts and closures have been concentrated among the small shoe makers. The larger manufacturers, like Lambert, have tended to restrict cost cutting to short-time working and natural wastage.

Unless there is a significant improvement in trading conditions, other leading manufacturers will be forced to follow Lambert by resorting to large-scale redundancies. Moreover, the long-term future of the industry will be in jeopardy.

The trouble began last autumn when the pound rose against the US dollar on the foreign exchange markets. As sterling strengthened, it became increasingly difficult for UK shoe makers to compete against the low-cost producers of the Far East, where currencies are linked to the dollar.

Unlike the clothing sector, which is sheltered from sudden surges of imports by the quotas negotiated under the Multi-Fibre Arrangement, the footwear industry is wholly exposed to fluctuations in international trade. The influx of imports accelerated from autumn onwards and the level of import penetration leapt from 58 to 64 per cent last year.

The pressure was most intense among makers of women's shoes, which account for half of UK production. The children's sector is sheltered from imports, while men's shoe manufacturers have benefited from healthy exports and the fashion for traditional English brogues.

UK FOOTWEAR MARKET

	UK Output*	Imports*	Import penetration
1980	130m	223m	47%
1981	123m	241m	53%
1982	119m	244m	55%
1983	119m	247m	56%
1984	122m	268m	61%
1985	129m	268m	59%
1986	129m	264m	58%
1987	120m	278m	64%

*Pairs of shoes

Source: British Footwear Manufacturers Federation

But the women's shoe companies also suffered from a fall in demand for classic court shoes, a UK speciality, and from structural changes within the retail sector.

For decades, footwear retailing has been dominated by the British Shoe Corporation, a Sears subsidiary that includes the Dolcis and Freeman Hardy Willis chains. But the growth of new forces, such as Next, is beginning to erode BSC's position.

Moreover, other retailers have been reviewing their approach. Marks and Spencer, which buys about 5 per cent of the UK industry's output, has been moving upmarket by selling more leather shoes. That has prompted some M and S suppliers to change to new product areas and the pattern of trade has been temporarily disrupted.

Almost all the women's shoe makers, large and small, saw output falter and profitability fall last year. In the 1980s the sector has become increasingly polarised between a few, very large, highly automated companies and hundreds of small family businesses.

So far, the small companies have borne the brunt of the slump. But after a year of falling output, the larger companies are becoming increasingly vulnerable.

Lambert had to rely on profits from importing to compensate for losses in manufacturing in the first half of the year. It stopped recruiting a year ago – the workforce has since fallen by 200 to 1,250 – and introduced short-time working in the spring.

A month ago Lambert announced the closure of a factory in Bacup, Lancashire. The machinery and most of the workforce will transfer to another plant in Burnley. On Friday it asked for 50 redundancies at its three remaining factories.

Similarly the FII Group and C. & J. Clark have experienced short-time working. Clark has attempted to cut costs by introducing an "Operation Thrift" economy programme. It has also switched production at one factory from women's to children's shoes.

The only solace for manufacturers is that there are signs that import penetration may be slowing down. In May and June, the last two months for which statistics are available, the influx of imports fell by a few percentage points.

The consensus in the industry is that it is too soon to tell whether this slowdown represents the start of a long-term recovery. The dollar has rallied in recent months, but there has not yet been enough time for retailers to respond. Moreover, the underlying trends – falling output, less overtime and more short-time working – are still dispiriting manufacturers.

Mr Michael Fielden, director-general of the British Footwear Manufacturers Federation, is concerned that the "recovery" is indicative of an increasing seasonal pattern of production. He fears that the UK industry of the future may be busy during the summer making winter shoes but idle in winter as almost all summer shoes would be imported. That would present severe cash-flow difficulties for the shoe companies.

In the short term, the footwear companies are pinning their hopes on the possibility that the European Commission will impose quotas on imports from Taiwan. In the long term, they hope to benefit from the trend for retailers to forge closer links with faster, more flexible suppliers.

Yet all the manufacturers are acutely aware that it is notoriously difficult to recover lost sales from imports. At best, the pressure from imports will abate and the industry will return to stability. At worst, conditions will deteriorate and the cuts and closures will continue.

Posgate sent for trial

MR IAN POSGATE, the former leading Lloyd's insurance underwriter, Mr Kenneth Grob, former chairman of the insurance broking firm Alexander Howden, Mr Jack Carpenter, former deputy chairman of Alexander Howden, and Mr Colin Hart, a former Lloyd's underwriter, have been sent for trial at the Central Criminal Court, Old Bailey.

The committal proceedings for the four men, who face a long list of fraud and theft charges, were concluded on Friday.

One of the most serious charges is that against Mr Grob of the theft of $1.13m (£670,000) from Alexander Howden.

The trial, which concerns events in 1982 and before, is unlikely to start before the middle of next year.

Crash 'has not hit popularity of company mergers'

By Ralph Atkins, Economics Staff

OCTOBER'S stock market crash has not dampened the popularity of company mergers and acquisitions but has altered the way they are financed, a report published today says.

The upswing in spending on mergers and acquisitions continued into the first half of 1988, reports Lloyds Bank in its September economic bulletin.

It says a record £15.4bn was spent by UK industrial and commercial companies on acquiring their peers in 1987, including sales of subsidiaries. In the first six months of this year, spending was running at an annual rate of £18bn.

However, it says the planned integration of European markets by 1992 has made little impact on international mergers and acquisitions.

The bulletin says 11 per cent of UK industrial and commercial companies' spending on international mergers and acquisitions in 1987 went on European Community acquisitions – much less than the proportion of UK trade going to the EC.

UK companies remain the most important overseas investors in US industry. The value of UK acquisitions in the US last year is estimated to have been several times greater than those in the EC.

The report shows that cash accounted for a larger share of spending on acquisitions and mergers in the first half of this year than in 1987. Ordinary shares accounted for a smaller proportion.

It says that when stock markets are rising, shareholders in target companies may prefer payment in shares rather than cash because of capital gains tax advantages.

Benefits of mergers boom. Lloyds Bank Economic Bulletin, September 1988. Economics Department, Lloyds Bank, 71 Lombard Street, London, EC3P 3BS.

APPOINTMENTS

Grand Metropolitan development director

■ From October 1 Mr Malcolm N. Ross is appointed business development director for GRAND METROPOLITAN. He was with Associated British Foods, where he was managing director of the retail and catering division of Allied Bakeries. Mr David Woodward, director of planning, Allied Bakeries, will in addition become director of retail and catering.

■ Mr Dennis Wallis has been appointed to the board of GRESHAM UNDERWRITING AGENCIES. He will be the underwriter for a new aviation syndicate 1123 which will commence underwriting from January 1.

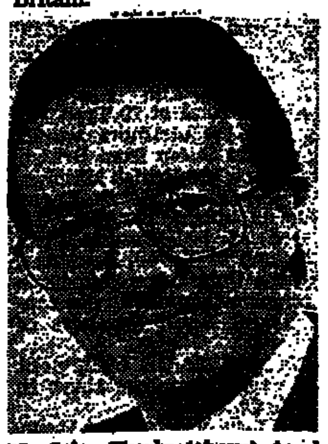
■ Mr David Vine has been appointed manufacturing director of T&N's UK automotive gasket subsidiary, Coopers Payen. He was manufacturing business manager, disc brake pads, at Ferodo, another subsidiary.

■ Mr R.J. Newell and Mr J. Tibbs have been appointed to the board of HEWGATE CONSTRUCTION.

■ Mr John Cooper, a former rear admiral in the Royal Navy, has joined FERRANTI COMPUTER SYSTEMS, Bracknell, as project director to head work on the command system for Type 23 frigates. He was chief of the Ministry of Defence's strategic systems executive.

JUPITER TARBUTT has appointed Mr Michael Fone (above) as an executive director. He joins on October 1 from Rea Brothers Group, where he was managing director of Rea Brothers, and chairman of Rea Brothers (Investment Management).

■ KLEEN-E-ZE HOLDINGS has appointed Mr W.M. Collins to the new post of chief executive, industrial operations. He will join the main group board. Mr Collins was chief executive of Berger Britain.



Mr John Hardy (above), head of consumer electronic banking at Girobank, has been elected to a third term as chairman of the LINK national cash network.

■ Mr Norman Shapley has been appointed financial director, and Mr Martin Hurst becomes a non-executive director of CENTURY FACTORS, Newbury, debt financing subsidiary of Close Brothers Group.

■ DAIWA EUROPE has appointed Mr Paul Nelson to the new post of executive director in charge of fixed interest sales. He was an executive director in charge of Eurobonds and gilts at County NatWest Securities.

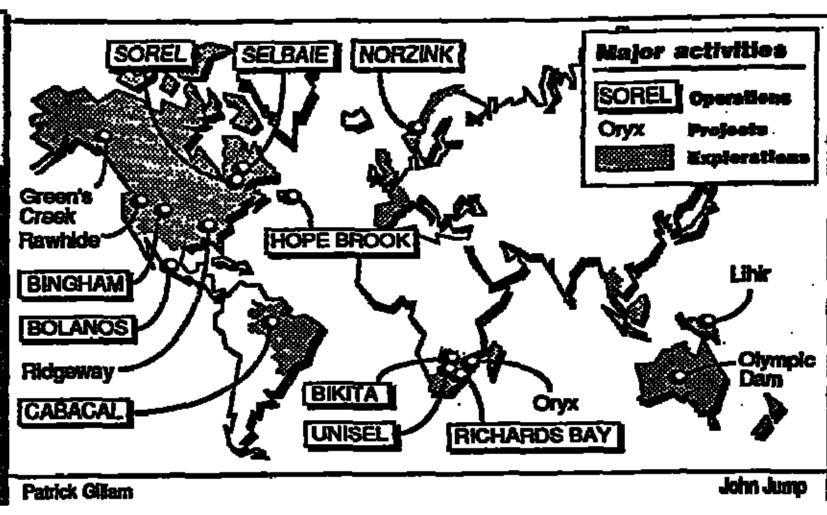
■ Dr Charles W. Munn has been appointed secretary of THE INSTITUTE OF BANKERS IN SCOTLAND. He is senior lecturer in economic history at Glasgow University.

■ Mr George Zoffinger, senior vice president, has been appointed general manager of FIDELITY BANK's London branch, and head of the bank's London group. The bank is a subsidiary of Fidelcor Inc., of the US.

■ Mr Bob Kimpson and Mr David Hughes have been promoted to directors of BAKER TILLY MANAGEMENT CONSULTANTS.

MANAGEMENT

Patrick Gillam



John Jump

BP Minerals: climbing out of the hole it dug for itself

Kenneth Gooding reports on the improved prospects for the oil group's subsidiary

At long last British Petroleum's sortie into the mining and metals business, until recently described by analysts as an unmitigated disaster, shows every sign of coming good.

It has taken much patience, considerable pain in terms of jobs lost, and huge investment, but BP Minerals International is on course this year to produce a profit large enough to make a difference even to BP, Britain's biggest company.

BP Minerals brings together all the group's mineral interests except for oil, gas and coal.

Its assets are drawn mainly from two acquisitions: Selection Trust, the London-based mining finance house taken over in 1980 for £407m; and Kennecott Corporation, one of the world's biggest copper producers, which changed hands in 1981 for $1.8bn.

Patrick Gillam, the BP managing director responsible for BP Minerals, says candidly: "If you ask me whether we would buy these two companies at those kinds of prices all over again, the answer is: 'Definitely no'."

So why did BP first dig itself into this particular hole and why has it taken so long to struggle back out again?

BP was not the only oil company to go searching for mining and minerals assets at very high prices in the second half of the 1970s when the industry became anxious about the way oil and gas reserves were rapidly being depleted.

What set BP apart somewhat was that it started making acquisitions at a time when some oil companies were already ditching their investments after discovering there was a much lower rate of return on metals than on their mainstream products.

However, BP persevered and attempted to turn round its mining interests after the collapse in world metal prices in the first half of the 1980s. The other oil groups have mainly quit by selling or closing down these operations.

BP had started its diversification in a relatively quiet way in the late 1970s by setting up an in-house minerals unit which, among its first investments, took a 49 per cent stake in the Olympic Dam development in South Australia, discovered by BP's partner, Western Mining, in 1975.

The key to understanding this investment is that Olympic Dam has huge reserves of uranium (as well as copper, gold and silver) and BP was very much on the look-out for the alternative energy supplies it believed would be needed as oil ran out.

BP went on a spending spree and bought Selection Trust, a mining finance house which was developing some small mines and had some decent oil holdings.

John Jump, BP Minerals' chief executive, recalls that the original intention was to apply BP cash and resource technology to push Selection Trust into the front rank of world mining houses by grass-roots exploration.

But metals prices collapsed and stayed down so Selection Trust did not generate the cash to fund its exploration projects.

Meanwhile, in 1978, BP acquired a majority shareholding in Standard Oil Company of Ohio (Sohio), a group which had also diversified its base into chemicals, coal and minerals.

In 1981 Sohio was used to acquire Kennecott, owner of the Bingham Canyon copper-gold mine in Utah and with interests in several other minerals deposits, primarily in the US.

But closer examination revealed that about $1bn would be needed to modernise Bingham's antiquated equipment – an investment BP was in no mood to bear when the copper price looked likely to stay at a rock-bottom level for ever more.

Gillam, who took over responsibility for the minerals operations in 1982, says it immediately became apparent to him that the Selection Trust and Sohio minerals operations needed to be joined together so that they could share technology, exploration and development costs and for BP to have a world-class business.

But that was not possible – except in some form of cumbersome joint venture – until 1987 after BP took full control of Sohio.

The concept of a "BP Minerals International" fitted in well with BP's new group structure which it has employed since 1981 when it reorganised into six business streams operating worldwide. Each is run as a separate business in its own right, each with its own board (but without any non-BP directors).

Each business is controlled by way of an agreed ten-year strategic plan, an agreed five-year development plan and an annual operating plan against which performance can be judged.

Gillam points out that, as BP "is looking forward ten years, we are more interested in qualitative objectives rather than quantitive ones. We measure businesses by selective excellence or of 'being among the best in what you do'."

BP Minerals has shrunk in size following some substantial disposals of non-core operations and its turnover dropped from £786m in 1983 to £446m last year. But it is a key player in several industries, including copper, gold and titanium dioxide.

Indeed, BP Minerals is the world leader in the supply of titanium dioxide feedstocks to the pigment industry with 40 per cent of the market. The use of titanium dioxide has grown steadily to replace competitors such as clays and kaolins because it provides white finishes of superior quality and of less cost than obtainable elsewhere.

Consequently BP's QIT-Fer et Titane company, part of Kennecott and based in Montreal, Canada, has been making annual operating profits of between $80m and $100m for the past three years to offset losses in other parts of BP Minerals.

Another important string to BP Minerals' bow is the Olympic Dam project, potentially one of the world's major underground mines.

It is expected to begin operations this autumn and in the first five years annual production is forecast to be about 46,000 tonnes of copper, 1,900 tonnes of uranium oxide and 20,000 troy ounces of gold. This should increase significantly during the second production phase scheduled for the early 1990s.

BP gained its 49 per cent shareholding from Western Mining in return for providing all the finance – about A$800m – needed for the project.

Meanwhile, Bingham Canyon, which was closed in 1985 because of the low copper price, has been brought back to life by way of a radically-revised $400m modernisation scheme.

Analysts reckon that BP has achieved 80 per cent of the previously-planned improvements for only a third of the originally projected cost.

And – against a one-time price of $1 a lb – copper will be produced at nearer 20 cents than 30 cents a lb once the new equipment is running as scheduled in October.

A significant contribution to that cash cost figure, one of the lowest in the world, comes from the 300,000 troy ounces of gold a year Bingham will produce as a by-product of the 160,000 tonnes of refined copper. In the usual minerals industry style, BP takes in "gold credits" when assessing the cash cost of producing the copper and assumes a price of $400 a troy ounce for the gold compared with the recent market price of between $425 and $460.

Profit on the gold will be shared by another BP Minerals' business, BP Gold Company, which will buy Bingham's yellow metal at the cash production cost of about $195 an ounce.

BP Gold incorporates most of the group's gold mining operations except for those in South Africa and Canada which have been excluded so as to give the company a clear image as a US gold producer.

The group is to float 15 per cent of BP Gold on the New York Stock Exchange later this month to raise more than $200m.

Jump insists this is not part of the BP group's current round of asset sales to reduce debt but is a typical minerals industry action to spread some of the risks that mining inevitably involves.

The potential jewel in BP Gold's crown and a mine which could catapult the company into the first division of world gold producers – those with an output of 1m ounces or more a year – is Lihir Island in Papua New Guinea. BP Minerals is spending $60m on early work at Lihir and, if a decision to develop a mine is given early next year – by no means a certainty – Lihir should produce more than 500,000 ounces annually in the early 1990s.

BP Minerals' investment in these and other projects has been costing more than $600m a year and expenditure will continue at that level in 1988. Then it should ease back because, apart from exploration expenditure – currently running at an annual $40m and covering projects in 16 countries - only Lihir and a potential project in Madagascar for production of beach sand ilmenite deposits will be left to pay for.

What do these developments add up to on the bottom line?

From 1983 to 1985 inclusive, BP Minerals sustained operating losses totalling £377m. There was a modest operating profit of £45m in 1986 and one of £125m last year.

Thanks to the dramatic increase in the price of copper, which has been selling at about $1 a lb since last autumn, and growing gold output, QIT is not the only profit-producer within BP Minerals in 1988.

In the first quarter of this year BP Minerals' operating profit jumped to £106m. This gave a return on capital employed of 13.3 per cent compared with 7.9 per cent for the whole of last year.

Prospects for the rest of 1988 look bright.

Gillam says: "It has given us great satisfaction to bring together the minerals assets of Selection Trust and Standard Oil into one, world-class group. We have brought the business to a point where it is a rewarding and successful one for BP."

The parent group has yet to make up its mind about floating part of BP Minerals on the stock market, but Gillam makes it clear that the subject is now very much on the agenda.

Higher severance pay, lower salary

Michael Skapinker on the likely fate of redundant US managers

What sort of manager is likely to fall victim to the American corporate axe?

Out-of-work US managers are younger than in the past, according to a study by Drake Beam Morin, a large firm of outplacement consultants. Outplacement consultants counsel redundant managers and help them find new jobs.

DBM says that the average age of the typical "displaced executive" using its services is now 44, compared with 46 seven years ago. "The fact that the average age of our clients has come down over the years reflects the deepness of cuts in corporations," according to James Cabrera, President of DBM. "Companies are eliminating even lower levels of middle management, reaching a younger age of middle manager."

On the other hand, today's unemployed managers have less difficulty finding new jobs. The average time to find a new job has dropped from 5.6 months over the last seven years to 5.1 months today. Half of the managers that DBM dealt with found new jobs in under 4.1 months.

Severance payments made to redundant managers have increased slightly, from 5.5 months of pay seven years ago to 5.7 months today.

Although it takes unemployed managers less time to find work than in the past, those who had previously been in general management positions often have to move into a different line of work, such as sales and marketing.

Twenty-five per cent of DBM's clients had jobs in general management before they were dismissed, but only 20 per cent of their clients moved on to similar positions. Those who did get new general management jobs had to accept lower salaries.

Sales and marketing jobs proved easier to find. Although only 15 per cent of DBM clients had been in sales and marketing before they lost their jobs, 21 per cent found new jobs in these areas.

1988 Drake Beam Morin Executive Outplacement Study, 100 Park Avenue, New York, NY 10017. Free.

Business courses

Structured systems analysis and design method, London, September 26 and December 5. Fee: first delegate £245; additional delegates £220. Subject to VAT. Details from The Infomatics Resource Centre, 2 The Chapel, Royal Victoria Patriotic Building, Fitzhugh Grove, London SW18 3SX. Tel: 01-871 2546; Telex: 299180 MONINT G; Fax: 871 3866.

Electronic financial services in the 1990s, London. October 20-21. Fee: £520 plus VAT. Details from Financial Times Conference Organisation, 126 Jermyn Street, London SW1Y 4UJ. Tel: 01-925 2323; Telex 27347 FTCONF G; Fax 925 2125.

Introduction to operational audit, Amsterdam (September 21-22); Geneva (November 16-17). Fee: £575. Details from Conference Organiser, Business Research International, IBC House, Canada Road, Byfleet, Surrey KT14 7JL. Tel: 01-631 3214.

Diverse businesses: how to add value from the centre, London. October 17. Fee: £220; individual/associate members £172.50; corporate members £143.75. Details from the Strategic Planning Society, 15 Belgrave Square, London SW1X 8PU. Tel: 01-235 0246.

Winning strategies for the 1990s, Amsterdam. October 17-20. Fee: Members of SMS or VSB $495, non-members $565; accompanying persons (of members) $120; (of non-members) $120. Details from Bernie Brilman PCO, Parkweg 2, 2271 AJ Voorburg The Netherlands. Tel: (31)70 863850.

Investor relations, London. October 11. Fee: £281.75. Details from Jenny Kerr, International Business Communications, Bath House (3rd Floor), 56 Holborn Viaduct, London EC1A 2EX. Tel: 01-236 4080. Telex: 888870. Fax: 01-248 2964.

Managing business information systems, Cranfield. October 23-28. Fee: £850 + accommodation. Details from programme administrator, managing the information systems resource, Cranfield School of Management, Cranfield, Bedford MK43 0AL. Tel: 0234 751122. Telex: 826559.

Offices in Scotland

LAING MANAGEMENT CONTRACTING (SCOTLAND) has been appointed as construction manager by Tanfield House for a £16m two-storey building in Edinburgh for occupation by the Standard Life Assurance Co. The project, which has started, is in addition to the construction management contract for the adjacent administrative offices which Laing Management Contracting is carrying out for Tanfield House, again for occupation by Standard Life. Total value of the two contracts is about£47m. The two-storey building will be clad in natural stonework, glazed walling and lead-clad steel roofing. The contract includes car parking, and landscaping.

Docklands projects

WATERMANS has been appointed structural engineering consultants for two Docklands projects at a total contract value of more than £54m. At City Reach on the Isle of Dogs, Watermans has been appointed by Indescon, for the £30m 280,000 sq ft final phase development of offices and basement car parking on Greenwich View. The fast-track structure will be steel-framed with a composite floor deck rising from piled foundations and clad in granite and glass. Joint developers are Robert Ogden Estates and Mr Derek Waiter, Indescon chairman. The second, valued at some £24m, is at Arrowhead Quay for joint clients of Wiggins Group and the Port of London Authority. The 200,000 sq ft project is the first phase in a much larger developmment and includes business appartments, retail sites, a health club and basement car parking. The structure will be reinforced concrete flat slab on large diameter pile foundations.

CONSTRUCTION CONTRACTS

£28m Stock Exchange building

WIMPEY CONSTRUCTON MANAGEMENT has been awarded work totalling nearly £34m.

In the City of London, work is under way on a £28m contract awarded by the International Stock Exchange for its new centre. The contract involves construction of an 144,000 sq ft nine-storey building, of which three storeys are below ground. The building, which will be completed in September, 1989, is to retain part of the period facade and will include underground car-parking.

The company has a £5.7m contract from Lecontie Plastics for a production plant at Telford, Shropshire. The contract, due for completion in February, is for a 140,000 sq ft single-storey building.

Wimpey Construction UK has been awarded orders totalling over £11m. The West Yorkshire Police Authority has awarded a £4m contract for a police station in Bradford. The 5,650 sq metres complex will consist of single, two and three-storeys administration blocks of concrete frame construction, and is due for completion in June 1990.

The company has £2.1m contract from Kingston-upon-Hull City Council for the Treasury Building in Guildhall Road. The 3950 sq metres three-storey office block is to be completed by the middle of next year.

Wimpey will refurbish the City Hall in Victoria Square for the City Council by the end of the month. The work includes balcony seating, alterations to support structures, repairs to the stage floor and upgrading fire safety features.

In Leeds, Wimpey has been awarded a £3m contract by the City Council for the Hunslet and Harehills schools in Harehills Lane, Hunslet. The project involves construction of two single-storey primary schools, each with a floor area of some 3660 sq metres. Both are due for completion in August next year.

Major warehouse distribution centre

MOWLEM BUILDING has been awarded a £20m contract by ASDA for construction of a 33,000 sq metre distribution warehouse at Dartford, Kent, which will provide cold stores, chilled areas and ambient stores. Completion is scheduled for May 1989.

Similar projects include a headquarters and distribution facility for Mitsubishi Electric UK at Welham Green, near Hatfield and a distribution complex, also at Welham Green, for Tesco Stores.

Contracts worth over £11m have been awarded to the civil engineering division. The largest is the £4.4m FIBUA (fighting in built-up areas) training village at Sennybridge, South Wales, awarded by PSA (Cardiff). The contract involves 31 concrete buildings and infrastructure. PSA (Ruislip) has awarded three contracts in Cambridgeshire. Two of these are bulk fuel installations at RAF Wittering (£1.3m) and RAF Alconbury (£1.5m). The third is a runway reconstruction at RAF Mildenhall(£2.5m).

A £1.7m contract at Alwen Water Treatment Works, Clwyd, is from the Welsh Water Authority. It comprises filter, wash water and outfall works with associated pipe and road works. Work has started for completion in July.

Mowlem Management has started work on four two-storey office blocks, for George Kingsbury & Co (Machine Tools), next to its factory site between the Causeway and River Thames, at Staines, Middlesex. Valued at £8m, they will provide Kingsbury with 87,000 sq ft of office accommodation. Completion is scheduled for September 1989.

World Student Games facilities

CLIFFORD BARNETT GROUP has won over £25m of leisure development contracts since its acquisition by Parkdale last February. Sheffield City Council's design competition for a £10m Olympic standard water polo and volley ball centre for the 1991 World Student Games has been won by the company. The City Council's special requirement that the complex should be made available for community use after the games has allowed the company to develop an approach which will include moving floors over the pools.

The company has been appointed to design and construct leisure facilities in a parkland setting at a cost of £6.25m for Mansfield District Council. Other contracts include water-based leisure facilities at Bude for North Cornwall District Council and at Prudhoe for Tynedale District Council. Work has started on developments totalling £7.5m at Malvern, Nelson and Morecambe Leisure Park.

Factory development in Sheffield

SHEPHERD DESIGN AND BUILD has won a £4m contract for the first phase of a factory building programme at Holbrook, Sheffield for SKF & Dormer Tools (Sheffield). The order is for the design and construction of a single-storey, 108,000 sq ft building for the manufacture of engineers' cutting tools. Provision of ancillary amenities, first floor plant accommodation, an isolated bulk oil building and associated external works are included in the contract.

The company has won a £2.8m contract to build an extension for The Wine Society of Gunnels Wood Road, Stevenage, Hertfordshire. This incorporates what is belived to be the largest cellar in the world for wines owned by private individuals. Shepherd is to build a duty-paid wine warehouse to link with existing premises. The warehouse will provide an additional 54,000 sq ft of wine storage area, plus office accommodation. When the extension is completed, the complex will provide secure, temperature-controlled storage for a total of 3m bottles of wine. One million bottles will be held for private owners, making it probably the world's largest cellar for privately-owned wine.

DIARY DATES

Trade Fairs and Exhibitions: UK

Current
International Exhibition & Air Display (01-839 3231) (until September 11)
Farnborough

September 11-14
Gifts West (01-637 2400)
Bristol Exhibition Centre

September 16-24
British Marine Industries Federation International Boat Show(0703 737400)
Southampton

September 25-27
International Garden and Leisure Exhibition - GLEE (01-390 2211)
NEC, Birmingham

September 27-29
Water and Environmental Management Exhibition and Conference (01-637 2400)
Eastbourne

September 27-29
City of London Wine Fair (01-938 4141)
Barbican, London EC2

September 28-30
National Finance Directors Exhibition and Conference (01-837 1133)
Business Design Centre, London

October 2-4
International Flower Trades Exhibition - IFTEX (01-486 1951)
Alexandra Palace, London

Overseas Exhibitions

Current
International Machinery, Factory Automation & Electronic Technical Exhibition - MECT-ASIA (0494 729406) (until September 6)
Taipei

September 4-10
International Autumn Fair (0375 392222)
Leipzig

September 4-8
Crystalware, China, Ceramics, Jewellery, Gifts and Furnishing Articles Exhibition - EUROPACADO (01-434 1825)
Brussels

September 8-10
Building and Construction Exhibition - CONBUILD (021-454 3866)
Sydney

September 7-9
International Autumn Fair (01-977 4551)
Vienna

September 11-18
International Autumn Fair (Zagreb 41/511-666)
Zagreb

September 13-18
International Motor Car Workshop, Service Station Equipment and Auto Spare Parts and Accessories Trade Fair (01-734 0543)
Frankfurt

Business and management conferences

September 8-9
CBI: Increasing your sales to the Ministry of Defence (01-379 7400)
Centre Point, London WC1

September 8-9
The Industrial Society: Industrial relations for new managers (01-262 2401)
Central London

September 9
Channel Tunnel Conference: Channel Tunnel - make it your business (0904 653655)
Viking Hotel, York

September 12
The Economist: 1992 — The implications for marketing, advertising and the media (01-839 7000)
Marriott Hotel, London

September 12
CBI/Marketing Society: Mastering the market (01-379 7400)
Centre Point, London WC1

September 13
CBI Conferences: European standards — Who needs them? (01-379 7400)
Centre Point, London WC1

September 14-15
Employment Research Unit annual conference : New forms of ownership — management and employment (0222-42588)
Cardiff Business School

September 16
The Industrial Society: Harmonisation — A one-day seminar to examine the principles and practice of harmonising terms and conditions of employment (01-839 4300)
3 Carlton House Terrace, London SW1

September 16
Hawksmere: Insurance aspects of property investment and development (01-824 8257)
London Press Centre

September 19,20,21
The FT City seminar (01-925 2323)
Plaisterers Hall, London EC2

September 20
CBI Conferences: Your annual report (01-379 7400)
Centre Point, London

September 21-23
International Chamber of Commerce: Investing for growth - opportunities in worldwide deregulation trends (Paris (1) 45.62.34.56)
Istanbul

Anyone wishing to attend any of the above events is advised to telephone the organisers to ensure that there have been no changes in the details published

FINANCIAL

TODAY
COMPANY MEETINGS-
Excalibur Jewellery, Moat House, West Bromich, 11.30
Godwin Warren Control Systems, Floor 4, Southgate, Whitefriars, Lewins Mead, Bristol, 12.00
Zetters, Clerkenwell Conference Centre, Clerkenwell Green, E.C., 10.00
BOARD MEETINGS-
Finals:
Goodhead Print
Haynes Publishing
Interims:
Aade Property
Aspen Communications
CRH
Consolidated Venture Trust
Dagenham Motors
Edmond Hldgs.
Executex Clothes
Handley-Walker
Linread
Miller (Stanley) Hldgs.
Persimmon
Pickwick
Quicks Group
DIVIDEND AND INTEREST PAYMENTS-
British Bloodstock Agency 6.3p
British Telecom 5.75p
Coloroll Group 3.96p
Davenport Knitwear 6.03p
Lebowa Platinum Mines 4cts.
MS Intl. 2.55p
Meyer Intl. 7.1p
Prism Leisure Corp. 3p
Rustenburg Platinum Hldgs. 120cts.
Scottish & Newcastle Breweries 6.44p
Stakis 0.62p
TSB Channel Islands 2.2p
TOMORROW
COMPANY MEETINGS-
Alphameric, Bakers Hall, 9 Harp Lane, E.C., 12.00
Birmingham Mint Group, Birmingham Botanical Gardens, Westbourne Road, Edgbaston, Birmingham, 12.00
Compco Hldgs., 33 Cork Street, W., 11.00
Danae Inv. Tst., 99 Charterhouse Street, E.C., 12.30
Ford Sellar Morris Properties, The Westbury Hotel, Conduit Street, W., 12.00
BOARD MEETINGS
Finals:
Black Peter
Intl. Colour Management
Wyevale Garden Centres
Interims:
Bodycote
Booker
Bowater Inds.
Brammer
Campari Intl.
Clayform Props.
Costain
Eadie Hldgs.
Esperset
Freeman Group
Hambro Countrywide
IMI
Lopex Communications
MS Cash & Carry
MTM
Metal Closures
Pentos
Provident Financial
Robinson Bros. (Ryders Green)
Ropner
Save & Prosper Gold Fund
Sedgwick Group
Tozer Kemsley & Millbourn
VG Instruments
Wilson (Connolly) Hldgs.
DIVIDEND AND INTEREST PAYMENTS-
BFG Finance Co. BV Fltg. Rate Nts. 1996 $190.65
Bank of Greece 10¼% Ln. 2010 (Reg.) 5.375pc.
Barclays Overseas Inv. Co. BV Gtd. Fltg. Rate Nts. 2004 $179.22
Blue Circle Inds. 9% Deb. 92/97 4.5pc.
Chemical Banking Corp. Gtd. Fltg. Rate Sub. Nts. 1996 $203.71
Countryside Properties 1p
Croda Cosmetics & Toiletries 7½% Uns. Ln. 87/92 3.75pc.
Emerch Corp. 20cts.
IMI 7¼% Uns. Ln. 88/91 3.625pc.
Joseph (Leopold) Hldgs. 9¼% Uns. Ln. 97/02 4.625pc.
Lockheed Corp. 40cts.
Redland 7½% Red. Deb. 90/95 3.75pc.
Rockwell Intl. Corp. 18cts.
Whitbread & Co. 9¾% Red. Deb. 91/96 4.875pc.
WEDNESDAY SEPTEMBER 7
COMPANY MEETINGS-
Bespak, Bergen Way, North Lynn Industrial Estate, King's Lynn, Norfolk, 10.45
Ferranti Intl. Signal, Hotel Intercontinental, 1 Hamilton Place, W., 12.15
Fitch Lovell, Plaisterers Hall, 1 London Wall, E.C., 3.00
Nesco Investments, Confederation of British Industries, Centre Point, 103 New Oxford Street, W.C., 11.00
Porter Chadburn, The Park Hotel, Park Lane West, Netherton, Bootle, 12.15
Reed Executive, 114 Peascod Street, Windsor, Berkshire, 3.00
Syltone, Post House Hotel, Leeds Road, Bramhope, 2.30
Worthington (A. J.) Hldgs., Portland Mills, Leek, Staffordshire, 11.00
BOARD MEETINGS-
Finals:
Isotron
Orchid Technology
Ricardo Consulting Eng.
Sinclair Goldsmith
Interims:
ABB Vent.
ASW Hldgs.
Asset Trust
BAT Inds.
BICC
Bestwood
Blue Circle
Halls, Homes & Gardens
Hillsdown Hldgs.
BISTEM
Intl. Business Comms.
Legal & General
McLaughlin & Harvey
Natural Resources Inv. Trust
Nurdin & Peacock
Portals
Shorco Group
Sun Alliance & London Ins.
Trade Indemnity
Williams Hldgs.
Wimpey
DIVIDEND AND INTEREST PAYMENTS-
Alphameric 2.5p
Barclays Bank 7½pc Uns. Ln. 1986/91 3.75pc
British Kidney Patient Ass. Inv. Tst. 3.5p
Broad Street 1.1p
Bullough 5p
Consolidated Gold Fields Gtd. Fltg. Rate Nts. 1995 £113.90
Prudential Corp. Fltg Rate Nts. 1998 £226.80
Sainsbury(J) 7¼pc 1st Mtg. Deb. 1987/92 3.625pc
THURSDAY SEPTEMBER 8
COMPANY MEETINGS-
Bulmer (H. P.) Hldgs., The Cider Mills, Plough Lane, Hereford, 2.30
Coated Electrodes Intl., Sarlad Intl., Cobner Wood Close, Chesterfield, 11.00
Harris (Philip) Hldgs., Penns Hall Hotel, Penns Lane, Walmley, Sutton Coldfield, 12.00
Lawrie Group, 1 Hobart Place, S.W., 11.00
Redland, Plaisterers Hall, 1 London Wall, E.C., 12.00
Robertson Group, Brown's Hotel, Dover Street, W., 12.00
Tops Estates, 77 South Audley Street, W., 11.00
BOARD MEETINGS-
Finals:
Dolphin Packaging
Interims:
Abbeycrest
Acorn Computer Group
Anglo American Gold Inv. Co.
Bowden Wilson
British Syphon
Burmah Oil
Cookson
Enterprise Oil
Gibbs & Dandy
Hestair
Keep Trust
Laird Group
Morgan Grenfell
Reckitt & Colman
Seacon Hldgs.
Technology Project Services
Tyne Tees T.V.
Wereldhave NV
DIVIDEND AND INTEREST PAYMENTS-
Bank of Ireland Und. Fltg. Rate Nts. $202.85
Chase Manhattan Fltg. Rate Sub. Nts. 2009 $226.84
Chester Waterworks 4.2pc 2.1p
Do. 3.15pc Pf. 1.575p
Control Techniques 1.5p
Cowie(T) 1.2p
Hongkong & Shanghai Banking Prim Cap FRN $100.63
Israel(Jack L.) 0.8p
Morris Ashby 2p
Norfolk House 0.75p
Renold 7⅝pc 2nd Deb 1992/97 3.8125pc
Union Square 0.225p
Widney 0.5p
Worthington(A.J.) 0.8p
Yeoman Inv. Tst. 4.3p
FRIDAY SEPTEMBER 9
COMPANY MEETINGS-
General Electric Company, The Dorchester, Park Lane, W., 12.00
Stockdale Hldgs., The Abercorn Rooms, Great Eastern Hotel, Liverpool Street, 10.00
BOARD MEETINGS-
Finals:
Alumasc
Citygrove
Dale Group
Equity & Law Intl. Funds
Second Alliance Trust
Sheldon Jones
Walker (Thos.)
Interims:
Aurora
City & Commercial Inv. Trust
Daniels (S.)
Elys (Wimbledon)
Suter
DIVIDEND AND INTEREST PAYMENTS-
Alcan Aluminium 22cts
Allied-Signal 45cts
Anheuser-Busch 18cts
Barnes Group 30cts
Birmid Qualcast 3.5p
Boeing 40cts
Christiania Bank Fltg. Rate Sub. Nts. 1994 $364.17
Do. Fltg. Rate Sub. Nts. 2001 $364.58
Dun & Bradstreet 43½cts
Elandsrand Gold Mining 50cts
First Interstate Overseas Gtd Fltg Rate Nts. 1995 $196.06
HongKong(Selangor)Rubber 5p
Kraft 51cts
Lyons Irish Hldgs. 6.5p
National Medical Enterprises 17cts
NESCO Invs. 0.5p
PrinTech Intl. 1p
Robertson Group 2.4p
Royal Bank of Canada Fltg. Rate Deb. Nts. 2085 $201.25
Royal Trustco Fltg. Rate Sub. Debs. 2085 $365.44
South African Land & Expln. 6.00031p
Southwest 74.40887p
Stockdale 8p
TNT A$0.0375
Texaco 75cts
VSEL Consortium 7p
Warner-Lambert 54cts
Western Deep Levels 192.00066p
Do "S" 280cts
SATURDAY SEPTEMBER 10
DIVIDEND AND INTEREST PAYMENTS-
Agric. Mort. Corp. 6⅝pc Deb. 1985/90 3.3125pc
Exxon 85cts

CONTRACTS & TENDERS

APPOINTMENTS

COMPANY NOTICES

RENTALS

CLUBS

LEGAL NOTICES

PUBLIC NOTICES

ART GALLERIES

Few fringe benefits

EDINBURGH FESTIVAL

As standards sink slowly in the Firth of Forth, it becomes harder to tell the Fringe from the official offerings. Or so I reflected in the last few days of the Edinburgh International Festival, sitting through some lugubriously well-meaning chi-chi in a church-cum-cultural centre as ladies in print dresses and gardening hats shook their maraccas at sullen men across the stage – who shook right back and added a defiant tootle on the flute. *C'est magnifique mais ce n'est pas Euripides.*

Which is nevertheless what it was billed as. Shared Experience presented *The Bacchae* at St Bride's Centre; and from the initial drearily-intoned announcement of his divinity by a dowdily uncharismatic Dionysus, Nancy Meckler's earnest and badly-acted production is all one could have once hoped to avoid on the Fringe.

The benign appearance halfway through the wet matinee of Frank Dunlop, on the affable patrol that makes him the most accessible Festival Director ever, reminded us that this was an official Festival event. The decent studio-size classics that Ms Meckler executed at Leicester never approached international festival level.

This glum production – Teiresias' apologetic "Ho there! Who keeps the gate?" was the most unassertive entrance ever made by a trans-sexual seer – ranges from the expressionless through the unintentionally comic (the Bacchantes drop shoes and handbags in a heap to dance round, like the girls bopping together at a provincial disco) to the embarrassing writhing, panting and over-emoting from a drama therapy class.

Salvaged from this messy *and monotonous modernisation* is the most incisive Pentheus since the young Sean Connery muscled through the part in Oxford years ago. Peter Hamilton Dyer is intelligent, lucid, emotionally powerful. The sandy floor and row of pyrex pudding-basins for the maenads to freshen up in (design: David Roger) linger inexplicably in my memory.

Shared Experience is a touring company: they may be hitting your area next.

That perennial Fringe First winner John Godber was back with Hull Truck and a repertoire of favourites. This year's novelty, *Salt of the Earth*, illustrated Godber's strengths as writer/director: his lack of condescension towards his down-to-earth "little" people; and an ability to portray the remembered pleasures that inform a culture without provoking the shrill accusation of "nostalgia!" from those who see any non-judgemental depiction of the past as an evasion of theatrical duty. That said, the homely seam of warmth and wisdom mined by his Yorkshire folk with their comic cries of "Bloody 'ell!" is beginning to run thin.

The Shadow Syndicate produced authentic Jamesian shivers in their *Turn of the Screw* on a white-draped stage with much use of projected film and mirrors. Jon Pope's production and Adrian Johnston's ominous sound-track made up for dodgy acting, notably a Flora who clumped about simpering like a retarded Shirley Temple, and a Miles who depicted ambivalent childish innocence by ape-like shambling and an idiot grin.

In *Grand Magic* at the Assembly Rooms, Eduardo De Filippo trespasses on Pirandellian territory in this tale of a stiff-necked man tricked by a mountebank conjuror into believing everything is an illusion, from the pangs of hunger to his worried family and his deserting wife. When the latter comes back after four years, he refuses like Pirandello's Henry IV, to acknowlege the reality of "this archetypal image of the *returning wife.*" He retreats irretrievably (but how knowingly?) into the conviction that the magical experiment from the hotel terrace years before is continuing and that real time is suspended. One for collectors, but in John Retallack's production a very rough and ready performance.

Martin Hoyle

Amsterdam Concertgebouw

ALBERT HALL

The Amsterdam Concertgebouw Orchestra visited the Proms on Friday and Saturday under its new principal conductor Riccardo Chailly. The first of its programmes consisted of a mild and rather brief first half – Mozart's *Idomeneo* overture and Piano Concerto No. 19 in F (K.459) – and an ample second half: the Symphony No. 3 in D minor by Bruckner.

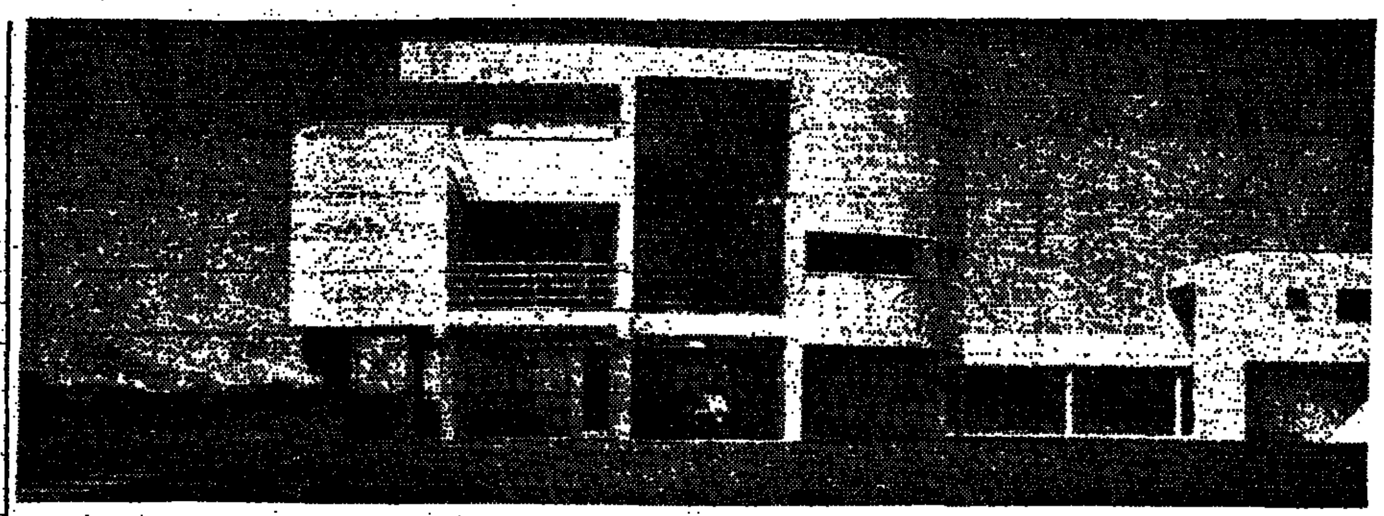
The overture was perfectly ravishing. The orchestra's sumptuous suavity was immediately in full evidence, and one had to thrill to the vivid and characterful playing of each section: the strings so silken, the woodwinds woody and immaculately breathed, the golden horns, and so on. The scalic figures which stand out in the short piece were memorably diaphanous.

The concerto was a quiet marvel. Radu Lupu was the soloist and played with a refinement in which the ideal Mozartian combination of sparkle and seriousness was achieved. He rarely seemed to rise above the dynamic level of *mezzopiano*, yet within that self-imposed limit (coinciding, as it were, with the dynamic range of the fortepiano of Mozart's day) he created a completely satisfying world of expression. His phrases were typically shaped with the sort of aristocratic panache that was always attributed to Clifford Curzon; and the way in which he sought (often visibly listening to the orchestra) to blend the varied colours of his his own part with those of the accompaniment was striking. The general impression he left was of an immensely communicative reticence, a suitably delicate but vastly virtuosic strength.

Chailly's support was sterling: the first movement was, just as David Cairns in his programme note suggested, of the nature of an idyll. There were many beautiful contributions throughout from the woodwinds, and the orchestral playing was always not only exactly articulated but of exactly the right tonal weight.

The Bruckner symphony, though, was made to seem too ravishing. The great hour-long structure was controlled with sturdy intellectual skill and the benefit of the plushest and most resilient tonal resources, but an essential cragginess and mountain-airiness was missing from the result. To invert a phrase of W.B. Yeats's, gold in Bruckner is not beauty.

Paul Driver



Whiter than white: Meier's summer house in the Hamptons, spawned a string of imitations

ARCHITECTURE

Monumental task for medallist

Colin Amery on the man chosen to design the new Getty centre

On a hilltop just to the north west of the intersection of Sunset Boulevard and the San Diego Freeway in Los Angeles, site work has started on what will be one of the most important public buildings in America, the new Getty Centre. The architect is Richard Meier, this year's winner of the Royal Gold Medal for architecture awarded by the RIBA.

Meier seems to be a natural winner. He gained the commission for the Museum for Decorative Arts in Frankfurt in 1980 and won the Pritzker Prize in 1984. It was a major triumph and challenge to secure the prize of the Getty in 1984 and more recently the commission to design the new City Hall and Central Library in The Hague in the Netherlands. During September (from September 20 to October 30 at the 9H Gallery, 26, Cramer Street, London, W.1.) the first British exhibition of Mr Meier's work will be held to coincide with the Gold Medal ceremony at the RIBA.

Whatever else he achieves it will be the Getty Centre, one of the most important cultural institutions in the world, that will be Meier's monument. He has not only been offered a stupendous *budget but also* a magnificent site. The opportunity exists on this Californian hill to create a garden and terraced landscape that will rival Versailles. The buildings will occupy a mere five of the 110 acres, and Meier is working with Emmet L Wemple and Associates to link his campus-like collection of low horizontal buildings to the landscape.

The topography has clearly been an important influence on the design. The museum and its offshoots will occupy two intersecting mountain ridges, and in the ravine between will be great terraced gardens falling to a large reflecting pool. The principal material for the entire complex will be stone – an enormous change for Meier, who is famous for his all-white houses and museums clad in enamelled metal or porcelain panels.

Richard Meier was born in New Jersey in 1934 and received his architectural training at Cornell University. In 1963 he established his own office in New York having been broken in as an architect in two modernist stables, Skidmore Owings and Merrill, and Marcel Breuer. He rose to early fame with his all-white modern American houses – mostly second homes in the Hamptons or Connecticut, the product of Meier's development of cubist ideas progressed through the work of Le Corbusier. They all have one remarkable quality – they model their interior volumes almost entirely by the play of light.

Meier has a strong aversion to colour in architecture. He has said "whiteness is one of the principle characteristics of my buildings – pure white forms which mould space and light." This approach works best when the houses are set in a naturally beautiful landscape. The Douglas House in Harbor Springs, Michigan (built in 1973) is a remarkable sight, apparently dropped ready made into the steep and wooded landscape falling down towards Lake Michigan. It is a modern fantasy house – every pine deck has a perfect view, every room is filled with light, volumes are varied with high rooms looking across blue waters. Architecturally it is vacant and so abstract that nature all around has full play.

In the London exhibition it will be possible to examine in detail a later development of Meier's house design. The Westchester House in Westchester County, New York was built between 1984 and 1986 on a rolling, wooded hillside. There is something here that hints at the future appearance of the Getty, because Meier uses masonry which relates carefully to his predictable metal and glass clad panelled walls that define the more public areas of the house. In his scheme for The Hague City Hall he has tried to be more contextual. His curved library echoes the nearby Bijenkorf department store building and the large areas of sheltered public space offer lessons for schemes like King's Cross in London.

Meier has the most coveted commission in the world so any critic is forced to ask, is he the right man for the job. The Getty will have an extraordinary collection, but at his Museum for the Decorative Arts in Frankfurt he has not shown himself to be very sensitive to the exhibits. In fact there are areas of the museum where the architecture works against the displays.

At the High Museum in Atlanta – which is his glossy high-tech version of the Frank Lloyd Wright's Guggenheim, the whole point of the museum is the ramped public spaces. Luckily the High Museum does not have a very good collection and so the museum building is itself the exhibit. But at the Getty things are very different and it has been quite a struggle to expand this architect's vocabulary to encompass more natural materials, less arbitrary geometry and simply a more enriched architecture.

Meier is the natural choice of the architectural establishment for the Gold Medal: he represents the dry, intellectual modernist approach. But he does not seem to be able to develop his real and powerful spatial skills beyond the manipulation of refined technical elements. All his work is clear and simple though more complex than it looks; the smooth engineering combined with the layering of interior spaces produces an architecture that is distinctive but ultimately repetitive and somewhat sterile.

Meier's architecture leaves you hungry for colour and texture. Too much coolness can be cruel. This is the architecture of celibacy – untouched by human hand and still frozen. His medal should have been polished aluminium.

Amnesty Concert

WEMBLEY STADIUM

From the moment that Bruce Springsteen, Sting, Peter Gabriel et al trooped on stage clutching the words to Bob Marley's anthem "Stand up for your rights" to the finale six hours later when the same bunch of musicians gathered together for Bob Dylan's "Chimes of freedom" there was little about the Amnesty International benefit at Wembley on Friday that bore any relation to a pop concert.

This was the start of the most altruistic six weeks in the history of pop as the three headliners, supported by the Senegalese singer Youssou N'Dour and the American ingenue Tracey Chapman, embark on a world tour to promote a "Universal Declaration of Human Rights."

OK, they can well afford to lend their voices, but giving up the time for so much hassle is unprecedented in this most selfish of businesses. It seems odd that the costs of the tour, mean that Amnesty International expects to gain little financially from such travail – the gross take at Wembley (70,000 fans times £22.50) must have well exceeded £1.5m – but this is seen as a hearts and minds mission.

And that was the key to the Wembley kick-off concert. Each artist made a personal committment to human rights. For N'Dour and Gabriel, who started the show, it carried a South African dimension, summed up in Gabriel's encore, "Biko", which began as a dirge and ended as an explosive cry of anger.

Perhaps because he was one of the first stars to embrace global politics Gabriel always looks smug when propagandising the cause, especially when decked in African tribal colours. A more convincing performance followed him on stage, from Tracey Chapman. She owes her fame, and a lot of money, to her brief spot at the Mandela concert here in June. Now, facing the throng with just an accoustic guitar, she rang out some of the strongest protest cries since Dylan. She seeks freedom for American blacks, their talents restricted to working as check-out girls, if employed at all, as in "Fast car", or subject to physical abuse, as in "Across the lines". Her bitter lyrics are wrapped in foreboding melodies. With her intense simplicity she dispelled the comforting notion that abuses only happen far off, over the horizon.

By now the audience was ready for some physical release from the lessons in ethics. It got it from Sting, looking amazingly happy and hippy, who threw off a short, sharp set of rock jazz, linking his plea for freedom to the plight of the lost ones in Chile, commemorated through "They dance alone", while finding time to twist with his pretty backing singer. He also showed some musical progress, playing up front guitar on "Fragile".

But if Sting was workmanlike Springsteen moved the evening up at least three notches. In the build-up to his performance the emotional temperature rose above the chilling winds blowing around Wembley. Then the E Street Band were into "Born in the USA" and he powered his way through an hour and more of energising blockbusters, culminating in "Born to Run". His plug for freedom was appropriately bizarre – the freedom to grow up in small-town America and to be raised on those three-minute expressions of human rights, pop songs. Springsteen as his usual uncomplicated, ballsy self, brought a missing human dimension to a night that was in danger of descending into well intentioned, but second hand, sentimentality.

Antony Thorncroft

SPONSORSHIP

A prudent venture

After the summer lull expect a host of new arts sponsorship initiatives in the next few months. Companies are now well aware that to generate headlines they have to come up with something very imaginative – or very expensive. The Prudential, after a year of agonising, is on the point of combining the two.

The insurance company, perhaps motivated by the success of Royal Insurance signing up with the Royal Shakespeare Company, is likely to approve a £500,000 annual package covering a range of art forms. At the moment the Pru confines itself mainly to supporting the LPO, and this will continue.

One idea getting serious consideration is the arts competition to end all arts competitions. It will reward exciting new work in all the art forms, with an additional top prize in excess of £100,000 for the arts organisation – be it dance company, fringe theatre, or Covent Garden opera – which comes up with the best arts event of the year.

Competitions retain their popularity with prize money moving higher and higher. Aer Lingus is about to enter the crowded field of book awards, with a £30,000 prize which will *pip the £25,000 currently dis*tributed by Whitbread.

*

One of the more depressing theatrical scenes of last year was to see young City slickers revelling in the sordid machinations of *Serious Money*, the play which tried to put them in their place. They get another chance to gloat this week when *Dreams in an Empty City*, an Australian play which also probes financial chicanery, opens at the Lyric Hammersmith.

Encouraged by the City's liking for self-abuse the producer of the play, Annie Irving, spent over a year trying to raise the cash for it in the form of an investment or as a sponsorship vehicle from the Square Mile. Her main problem was that many of the companies she approached found it impossible to give a direct "no," with the result that she lived off phoney promises.

In the end her trump card was the agreement of the Prince of Wales to act as patron of *Oz 88*, billed as a "British tribute to the Australian theatre." The attraction of meeting the Prince at a gala evening unlocked the coffers, notably of London & Edinburgh Trust, which is putting up £40,000 in its first major sponsorship.

By some odd reasoning London & Edinburgh has also invested £20,000 in the show, making a distinction between sponsorship and investment, presumably for tax reasons. Another City firm taking the broad-minded, we-can-take-it, approach is the Australian-owned broker, TC Coombs.

Such sponsorships help to dispel the myth that companies only back safe and anaemic arts events. This is especially true at the Edinburgh Festival where Scottish Life, in its first sponsorship, supported the Japanese *Tempest* while the traditionally staid Bank of Scotland backed the bawdy *Cat Cinderella*.

Other Australian companies are rallying round *Dreams in an Empty City* in more homely ways – Fosters is providing non-stop lager for the cast during rehearsals and the five week run, and Rosemount is laying on the Australian wine. Whether they are trying to sabotage this jaundiced look at Big Business, or to ensure it is a roaring success, press night on Thursday will tell.

Pirelli, the tyre company, is naturally exploiting the £250,000-plus it invested in the new courtyard garden at the Victoria & Albert Museum, which bears its name. Next weekend it is sponsoring three concerts there, two featuring young classical musicians, and one jazz, at a reasonable cost of £12,000. They are free, with tickets available from Pirelli.

On Friday the French 19-year-old pianist Helene Grimaud performs; on Saturday its the turn of Russian violinist Maksim Vengerov, 14; and on Sunday there are two jazz concerts, with 18-year-old Jason Rebello starring.

The main gain for the V & A is attracting a younger audience to the museum, which is one of the objectives of director Elizabeth Esteve-Coll: hence the recent show of the Elton John collection (to be sold at Sotheby's this week) which attracted daily attendances way above 2,000.

Pirelli has a small annual arts budget, up to £40,000, but is constantly looking for new ventures, preferably with a youth link. Next week it is backing an art exhibition by Philip Howard at the Line Art Gallery in Wandsworth, mainly because he created his sculptures in rubber: *to some* consternation he has recently moved on to wood.

Pirelli also came to the aid of the storm-battered Kew Gardens by commissioning artist Norman Stevens to produce a print, priced at £200 and limited to an edition of 200, with the anticipated return of £40,000 going towards replanting the gardens. Pirelli may not be a big spender on the arts but, at the least, it is imaginative and approachable.

*

Debenham Tewson & Chinnocks, who describe themselves as international property advisers and who have the monumental task of letting Canary Wharf in Docklands, are supporting their first arts venture on September 28th. They have put £6,000 behind a concert by the Ambache Chamber Orchestra at the Old Vic. It is also the first time this theatre has played host to orchestral music. As a new sponsor *the money* has attracted a matching grant from the Business Sponsorship Incentive Scheme and this will finance another concert in Birmingham in February.

*

AT&T is to sponsor the forthcoming major David Hockney show at the Tate Gallery. It will be the multinational's first UK arts sponsorship. It backed the show in Los Angeles, but needed some arm twisting to continue the support in London. *The cost is a modest* £30,000.

*

So far the arts sponsorship world has not been affected by the decision in the Budget to tax all corporate entertainment expenses, including those for overseas customers. Although the entertainment of guests is an increasingly vital part of many sponsorship packages it is still a much smaller cost item than the actual expenditure on the arts event. Current *programmes will also* have been drawn up before the Budget announcement.

Indeed there are those in the sponsorship business who think it will gain as companies take a closer look at their corporate entertainment bills and wonder whether an arts event, with its additional promotional and altruistic advantages, might not offer a cheaper and more effective approach to wooing clients.

Antony Thorncroft

ARTS GUIDE

Sept 2-8

MUSIC

London

Philharmonia Orchestra, conducted by Andrew Davis with Garrick Ohlsson (piano). Webern, Brahms, Strauss. Royal Albert Hall (Mon) (589 8212).
BBC Welsh Symphony Orchestra, conducted by James Loughran with Howard Shelley (piano). Berlioz, William Mathias, Elgar. Royal Albert Hall (Tue) (589 8212).
BBC Welsh Symphony Orchestra, conducted by Tadaaki Otaka with Cécile Ousset (piano). Schumann, Mahler. Royal Albert Hall (Wed) (589 8212).
London Sinfonietta, conducted by Lothar Zagrosek with Michael Collins (clarinet) and Maria Ewing (soprano). Stravinsky, Zimmermann, Don Banks, Weill. Royal Albert Hall (Thur) (589 8212).

Vienna

Wiener Mozart Orchester (in historical costume). Mozart. Sofiensaele (Wed) (72 21 98).
Budapest Festival Orchestra conducted by Ivan Fischer with Zoltan Kocsis (piano). Mozart, Bartok, Brahms, Stravinsky. Musikverein (Tues) (505 81 90).
Kodaly Choir from Debrecen, Hungary, director Kalman Strausz, conductor Manfred Huss. Beethoven (Missa Solemnis). Votivkirche (Thur).

Paris

Frederic Desenclos, organ. Dandrieu, J.S. Bach, C.P.E. Bach, Alain, Luciano Berio, Jean-Pierre Leguay. Saint Severin Church (Mon).
Quator Rosamonde, Laurent Cabasso, piano: Haydn, Schubert, Brahms. Auditorium des Halles (Tue).

Junges Philharmonisches Orchestra and Markusvokalensemble from Stuttgart conducted by Manfred Schreier. Messiaen. Saint-Eustace Church (Wed).

Berlin

Philharmonie, Orchestre National de France conducted by Lorin Maazel. Berlioz and Saint-Saens (Mon). Berlin Philharmonic Orchestra under Claudio Abbado with Maurizio Pollini (piano) and Marjana Lipovsek (alto). Schönberg and Brahms (Wed).

Cologne

Philharmonie, Orchestre National de France, under Lorin Maazel. Ravel, Roussel and Stravinsky (Wed).

Washington

Tangerine Dream. Three-member German synthesizer group known as the Godfather of New Age Music (Kennedy Center Concert Hall) (Thur) (254 3776)

Tokyo

Yong-Uck Kim (violin), Allison Eldredge (cello), with the Tokyo Philharmonic Orchestra conducted by Michiyoshi Inoue. Sibelius, Elgar. Suntory Hall (Tues) (795 4488).
Gennady Rozhdestvensky conducts the Yomiuri Symphony Orchestra. Haydn, Shostakovich. Tokyo Bunka Kaikan (Tues), Suntory Hall (Thurs) (270 6191).
NHK Symphony Orchestra conducted by Esa-Pekka Salonen. Messiaen (Turangalila Symphony). NHK Hall, Shibuya (Thurs) (465 1781).

London

Royal Opera, Covent Garden. No opera performances until 12 September.
English National Opera, Coliseum. The season opens with revivals of two of the less successful ENO productions of recent times. David Pountney's ugly, coarse-grained modern-dress Carmen sports at least a highly promising cast, including Jean Rigby, Arthur Davies, Sergey Leiferkus, and Susan Bullock. The limply staged wartime-in-Mussolini's-Italy Tosca production by Jonathan Miller has Janice Cairns in the title role, Edmund Barham, and Malcolm Donnelly.
Barbican Hall. Paco Peña's Flamenco Dance Company (Mon-Thur, Sat). (638 8891)
Queen Elizabeth Hall. Opera Factory production of Cosi fan Tutte conducted by Paul Daniel (Tue, Sat) (928 3191).
Sadlers Wells. Sept 1, dancing begins in London again after a momentary break with the arrival of the Cumbre Flamenco troupe on Sept 6 for a 10 day visit.

Vienna

State Opera. Cavalleria Rusticana, conductor, Adam Fischer, with Margarita Lilowa, Rohangiz Yachmi, Peter Dvorsky, Silvano Carroli (Wed). Lucia di Lammermoor, conducted by Marcello Panni, with Edita Gruberova, Waltraud Winsauer, Paola Coni, Francisco Araiza, Richard Burke (Thurs). Il Barbiere di Siviglia, conducted by Ion Marin, with Frederica von Stade, Majorie Vance, Robert Gambill, Alexander Maly (Mon). Mozart's Cosi fan Tutte, conducted by Christian Thielemann with Margaret Marshall, Margarita Hintermeier, Olivera Miljakovic (Tues). (Ph. 51444).
Volksoper. In repertory Die Lustige Witwe; Die Fledermaus; Arthur Schnitzler's Reigen (ballet); Kalman's Die Zirkusprinzessin; Hoffmanns Erzählungen; Die verkaufte Braut; Der Zigeunerbaron *(Ph. 51444).*

Tokyo

Teatro alla Scala, Milan. I Capuleti e i Montecchi, conducted by Riccardo Muti, directed by Pier Luigi Pizzi, with Agnes Baltsa or Dolores Ziegler as Romeo and Lella Cuberli or Lucia Aliberti as Giulietta. Tokyo Bunka Kaikan (Mon, Thurs). Nabucco, conducted by Riccardo Muti, directed by Franco Zefferelli, with Renato Bruson in the title role. NHK Hall (Wed) (725 8888)

Berlin

Deutsche Oper. Oedipus, specially composed for the Berlin Opera by Wolfgang Rihm, will be conducted by Christof Prick. Lulu in Götz Friedrich's production stars Patricia Wise, Emily Golden and David Griffith. Lady Macbeth von Mzensk by Shostakovich returns with Karan Armstrong, Kathryn Montgomery-Meissner and Dmiter Petkov. Aida with Bruna Balioni, Julia Varady and Giorgio Lamberti rounds off the week.

Hamburg

Staatsoper. Die Zauberflöte has fine interpretations by Hellen Kwon, Gabriele Fontana, Harald Stamm, Heinz Kruse and Franz Grundheber. Die verkaufte Braut is a well done repertoire performance. Der fliegende Holländer stars Richard Versalle in the title role, Elizabeth Connell, Ursula Boese, Rose van Dam and Kurt Moll.

Munich

Bayerische Staatsoper, the Munich opera house will be closed until April 8 for renovations.

Amsterdam

Muziektheater. Netherlands Opera production of Bluebeard's Castle by Bartok, with Henk Smit as Bluebeard and Kathrine Ciesinski as Judith. Directed by Herbert Wernicke, with the Netherlands Philharmonic under Hartmut Haenchen (Mon, premiere, and Thur). Premiere of Ron Bunzl's "ballet event" Mise-en-Cadre danced by the Cloud Chamber company and directed by the creator, with music by Jose-Luis Greco (Wed) (255 455).
Stadsschouwburg. The Hoofdstad Operetta Company in Karl Millöcker's Gasparone directed by Hans Fretzer (Tue to Thur). (24 23 11).

New York

New York City Opera (State Theatre, Lincoln Center). The week features Victor Herbert's Haughty Marietta in a new production by Theodore Pappas with sets by Oliver Smith. (496 0600).

Washington

Sullivan and Gilbert (Eisenhower). Fritz Weaver and Noel Harrison play the composing team that represented the highest artistic achievement of the Victorian age in this so-called "drama with music". Ends Oct 8. (254 3670).

As You Like It

PHOENIX

The Renaissance Theatre Company's *As You Like It* has relegated Kenneth Branagh to a clown's part, there being no real hero in this play. He is a very clownish clown, prowling about the stage in an orange check suit that labels him a *comic in a* production dressed chiefly as if in the early part of this century.

Mr Branagh acts occasionally as if he were in a television variety show, but is never anything but funny.

Orlando, the nearest we have to a hero, is played by James Larkin, who uses a deafening shout when ill-tempered but is tender enough with his Rosalind, even if she is disguised as a boy. Orlando fights a fine, long bout with Charles (Jimmy Yuill), whom he beats by pulling his beard.

The feeling is rustic throughout, as soon as the initial scene-setting passages in the "new Court" have been got out of the way. I found Samantha Bond's particularly rustic Phebe a perfect essence of the country life that Shakespeare imagined. Audrey was almost ladylike in contast, as Dearbhla Molloy played her, her hair tied up in a band.

Richard Easton does Jaques *very well indeed, with high* seriousness, even in his sometimes amusing lines, which must never sound as if they were meant to be funny – except to the audience. He will be happy with the converted Duke, the other Duke in morning dress, instead of plus-fours, both of them played by David Lloyd Meredith.

The decor by Jenny Tiramani is attractive and never intrusive, and the songs, newly composed by Pat Doyle, go back to the age of Mendelssohn.

Geraldine McEwan is the director.

B.A.Young

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The abuse of anti-dumping

WHAT IS the reason for the enthusiasm with which the European Commission has resorted to anti-dumping actions in the past few years, particularly against Far Eastern exporters? Are these really no more than a way of countering unfair trading practices? Or is anti-dumping viewed, instead, as a magic bullet that can both curb the exports of unduly competitive Far Eastern countries and strengthen such "strategic" industries as consumer electronics?

The suspicion that the wider objectives are in mind is reinforced by the decision last week to impose stiff anti-dumping penalties on video cassette recorder imports, a decision that appears to break new ground in several ways. The case is the biggest yet to be directed mainly at South Korean manufacturing industry. Until recently, anti-dumping action against Korea was inhibited by the low value of the won, which made it hard to establish that its industry was exporting products to the European Community at prices lower than those charged at home. The finding of dumping margins of as much as 29 per cent suggests that the commission has managed to resolve that technical conundrum, at least to its own satisfaction.

Inimical to clarity

The rationale advanced for the imposition of duties also suggests that the EC has enlarged its criteria for the finding of injury. The Commission says that "the maintenance of production by the Community industry is essential so that it can develop by its own efforts new technologies for consumer goods of the future". In effect, anti-dumping action is now introducing industrial policy by the back door. Two questions are raised, the first being whether anti-dumping procedures are well-suited to such an objective and the second being whether the objective is itself worthwhile.

The answer to the first question is almost certainly negative. The primary concern of these procedures is to enforce "fair" competition. Furthermore, the obscure manner in which they are enforced and the room they allow for subjective judgment are inimical to clarity on so important a matter as the future of consumer electronics.

If the EC believes certain industries need to be protected because of their strategic importance, it should tailor measures specifically to that purpose. They should be decided on the basis of a clearly articulated industrial rationale after consultation with a wide range of interest groups, above all consumers.

The second question is whether the industrial policy objective is itself appropriate. Experience is not encouraging, especially when the policy is a reactive one, as is inevitably the case for anti-dumping. Instead of governments picking the winners, the losers pick the governments.

Lame ducks abandoned

The undesirability of industrial policy has now been accepted by many European governments in the case of industries in inexorable long-term decline, such as shipbuilding and steel, where past efforts to prop up lame ducks have been largely abandoned. The belief persists, however, that high-technology sectors are exceptions.

That view can be justified only if these industries will ultimately perform effectively in international markets. Unfortunately, there is much evidence that Europe's weakness in consumer electronics is a chronic condition, stemming as much from slow adjustment to changes in demand, technology and production methods as from unfair competition.

Europe's two principal consumer electronics groups, Philips of the Netherlands and the French state-owned Thomson have recently accelerated efforts to rationalise their operations and improve their efficiency. But they have a long way to go. Philips admits to serious doubts about its own prospects and has hinted that further trade protection may be needed to ensure its long time survival in the business.

Protection, whether provided by anti-dumping duties or other measures, imposes a heavy cost on consumers. The very least the EC needs to do is to justify its nascent consumer electronics policy explicitly, not bring it in through the anti-dumping back door. Better still, it should recall not only its past experience with promotion of "strategic industries" but also the history of failure that now motivates these particular petitioners for protection – and forget the idea altogether.

Running for the White House

IT HAS been a while since an American election campaign officially began on a Labor Day, which is today, with so little to choose between the two candidates and with so much uncertainty about the electorate's aspirations.

National polls, which have been very volatile, put Vice President George Bush for the Republicans and Governor Michael Dukakis for the Democrats in a virtual dead heat. This is good news for Mr Bush, because he had been trailing badly, and because, in a tight race, there is some built-in advantage to the Republicans in the peculiar workings of the electoral college system.

It is even better news for Mr Bush given the controversy which has swirled around his running mate, Senator Dan Quayle. Mr Bush's recovery may be ascribed to the fact that he has at last begun to inspire some confidence, or to the Dukakis campaign going to sleep, or to both.

On the defensive

Certainly Mr Bush has grabbed the tactical initiative. He started with an eloquent convention acceptance speech, and has followed through with much less admirable attempts to impugn his opponent's patriotism. It is hard to believe that this last issue will play effectively throughout the campaign, but it certainly has, for the moment, thrown Mr Dukakis on the defensive.

There is always a large gulf between winning a nomination from nowhere and actually running for President. The latter requires a different level of organisation and tactical appreciation, simply because, in an age of declining party loyalty, the national electorate is inherently more sceptical than those committed enough to take part in party primaries.

The perfect example of this divide can be seen in the current relationship between Mr Dukakis and the Rev Jesse Jackson. Up to and through the convention, the two waged an honourable battle according to the lights of the party. It was appropriate and indeed inevitable that the civil rights leader should be promised a prominent role in the campaign proper. Yet in analysing on the national scale where Mr Jackson should be deployed, the Dukakis camp seems to have concluded that there are important states where he can hurt more than help. He is not surprisingly irritated, and his supporters could be turned off.

Tough row to hoe

Not that Mr Bush has any reason to be complacent either. His biggest problem is to hold on to the support of the mostly working class Democrats and independents who defected in droves to President Reagan. Throw in the gender gap, which the selection of Mr Quayle was somehow designed to close, and the fact that big states like California and Texas can no longer be considered natural Republican territory, and it could be argued that it is Mr Bush who has the tougher row to hoe.

One approach is to wrap himself in Mr Reagan's mantle at every opportunity and to use the President's favourite swear word, "liberal", whenever referring to Mr Dukakis. This may not be edifying, or even accurate, but it might work. For Mr Bush's star in the polls in the last month has risen almost exactly in line with that of Mr Reagan's, apparently because the Administration's troubles – Irangate, Panama and Edwin Meese in particular – no longer dominate the daily news.

What has not been seen so far, sadly, is much of the positive. As their respective convention speeches demonstrated, both Mr Bush and Mr Dukakis appear serious men capable of substantive debate on the great foreign and economic policy issues. The sooner they do this head-to-head for national, and international, consumption, the better. For though rough tactics and advertising images can also win campaigns, Americans generally do not vote for pigs in pokes.

David Thomas on how British teachers will cope with education reforms

Back to school and uncertainty

WHILE many of the children at the school gates this week for the start of the new school year will be bright-eyed and bushy-tailed after their long summer break, their teachers could be forgiven for rather more apprehension.

One sentiment recently united education ministers with their critics at the round of conferences with which the educational establishment fills its spare time. They agreed that the Government's education reforms, the most ambitious since the post-war Butler settlement, will not work unless they win teachers' approval.

Or to put it another way: the Government's drive to raise educational standards – an objective applauded by parents and employers alike – will not succeed unless the teaching force begins to recover its professional self-respect.

On the face of it, the 400,000 teachers in England and Wales (Scotland has its own educational system and traditions) are in no state to act as the shock troops of anyone's revolution. Battered by a decade which has seen a wave of industrial action in the schools, the teachers' image is in desperate need of a facelift.

More immediate problems will no doubt be on teachers' minds as they settle down to the new year. Thanks to the rollercoaster changes in school rolls (secondary rolls are still falling and primary rising), many will have to cope with a changed school environment. They may find fewer colleagues than last year or may have been re-deployed to an entirely different school.

True, few will confront the upheaval facing the teaching force in Hull, where removal vans have been criss-crossing the town during the summer. The education authority there is re-organising its entire education service. All Hull's 165 schools were shut last Thursday: 88 brand new schools opened on Friday with a sixth fewer teachers.

While the adjustment is much smaller in most areas, it can still affect a school's morale. Ms Brenda Grand teaches in a primary on a Birmingham council estate where the number of young children has been falling. Returning to a staff reduced from 15 to 13, she points to the impact of this attrition on the age structure of the school: "I'm one of the youngest members of staff – and I'm 39."

Most schools will, however, adjust quickly to these staffing changes, in principle no different from those found in any workplace. Less certain is how teachers will react to the queue of more fundamental reforms in the pipeline.

A tranche of teachers will this year start preparing for the new national curriculum. From next September, science and maths will be taught to five and 11-year olds according to the new regime – the first wave in a rolling programme which will not be fully completed until the next century.

Schools, and particularly heads, will have to cope this term with a shake-up of governing bodies designed to replace political placemen with more parents and people with practical experience. Just over the horizon is the plan to give governing bodies, and by implication head teachers, much greater control over school budgets.

The reforms will not work unless they take the teachers with them

Jokers in the pack include two measures designed to break the monopoly of local government control over state education. Some schools are certain to vote this academic year to opt out of local authority control, choosing instead to be funded directly by central government. Meanwhile, the first of the new City Technology Colleges opens this year at Solihull: designed for secondary children with a bent for science and technology, they will draw business into the running of state schools as never before.

The Government believes these two initiatives will put pressure on those schools remaining within the local authority ambit to improve their performance. Its critics, particularly in the main teaching unions, argue they will further demoralise the bulk of schools, not least by draining talent and resources away.

Beneath this din of ideological warfare, however, there are some signs of quieter times returning to the schools. Straws in the wind include:

● GCSE. The teachers have avoided any of the mud slung over the new 16+ General Certificate of Secondary Education exam. While the Government was accused of forcing the exam in too quickly and the examining groups were attacked for a plethora of blunders, no one turned their fire on the teachers. Everyone from the Education Secretary down praised the teachers for the extra work entailed by GCSE.

The morale boost of being praised for success after years of being linked to failure is obvious. "We have to turn that public satisfaction at the success of GCSE into support for local schools," comments Mr Doug McAvoy, deputy general secretary of the National Union of Teachers.

● Industrial relations. Industrial peace has returned to the classroom now that the spirit of moderation hovers over the two main teaching unions, the NUT and the NAS/UWT. The NAS/UWT had to abandon plans this summer for a half-day stoppage over extra payments for GCSE work because of a lack of enthusiasm from its members.

More fundamentally, NUT leaders pushed their union in a less militant direction this year, an admission that a further wave of industrial action is not feasible.

● Conditions of service. A reform implemented by the Government in the wake of the industrial action was to lay down precise conditions of service for teachers for the first time. It is now written in tablets of stone that a head can direct a teacher for 1,265 hours in a year.

The change has not proved the problem many predicted. Mr Tony Smith, director of schools at the Inner London Education Authority, says the new conditions have been accepted by teachers because they end years of uncertainty about their duties.

Others are more sceptical. Mr Pat Maguire, NUT divisional secretary in Humberside, says they are accepted because they are ignored, with teachers doing many more hours than those laid down.

Either way, however, the new conditions of service look set to become one of the fixed points within the teaching profession. How true that is of the new pay structure is less clear.

The 1987 settlement following the pay dispute boosted a teacher's pay on average by 16.4 per cent – enough to recover much, but by no means all, of the ground lost by teachers since the 1970s. It also introduced a system of incentive allowances, on top of the basic salary grade, to reward teachers taking on extra responsibilities, working in shortage subjects or showing outstanding classroom ability.

Doubts already exist, however, about whether the structure will be able to handle the pressure points on the profession. There are, first, well-documented shortages in specific subjects, such as maths, physics, technology, chemistry, languages and business studies, and in certain areas.

Second, there is the more general problem of maintaining the flow of good quality entrants into the profession. Official thinking rejects any suggestion that the entry salary for honours graduates – £8,859 a year – is out of line with most careers, but there is some acceptance that something has to be done to pay at the top end. Mr Kenneth Baker, the Education Secretary, has already dropped a heavy hint that heads and their deputies can expect an above average rise next year.

While Ministers have occasionally dropped hints about much greater pay flexibility, particularly once schools have more control over their budgets, the proposal for a general initiative such as regional pay to solve teacher shortages cuts little ice.

Some 'second earners' are believed to be doing very nicely

Privately, some people close to the debate argue that a teacher who is a second earner at the top of the basic grade (£13,863 a year) and does not live in London is doing very nicely. "Sexist as it may be, a wife is very content to teach in a local school and get home at the same time as the children," one said.

It is right to be sceptical, however, whether the existing pay structure will be appropriate to the intense demand for graduates which will emerge in the early 1990s when the sharp drop in 18-20 year olds will coincide with secondary rolls beginning to rise again.

Yet pay is only one factor in the equation. The interim advisory committee, set up to advise the Government on pay, pointed to many other causes of the low morale among teachers. High among these was the feeling among many teachers that they were unloved by the public.

One idea being floated to put this right is the creation of a General Teaching Council, modelled on the General Medical Council, which could control entry and standards in the profession. Two enthusiasts, Mr Alec Ross, professor of education at Lancaster University, and Mr Gerald Smith, head of an independent school in Northamptonshire, are working on parallel lines, with the Ross scheme perceived as closer to the unions.

Backers of the idea point to the General Teaching Council, which has regulated the profession in Scotland since the 1960s. However, the Government will not even react to the proposal until there is cast iron agreement on a scheme among all the protagonists, including employers and parents, a large hurdle in the factionalised educational world.

In any case, searching for a magic wand to restore the professional status of teachers may be misconceived. It is the conduct and behaviour of doctors, not the existence of the General Medical Council, which earns respect.

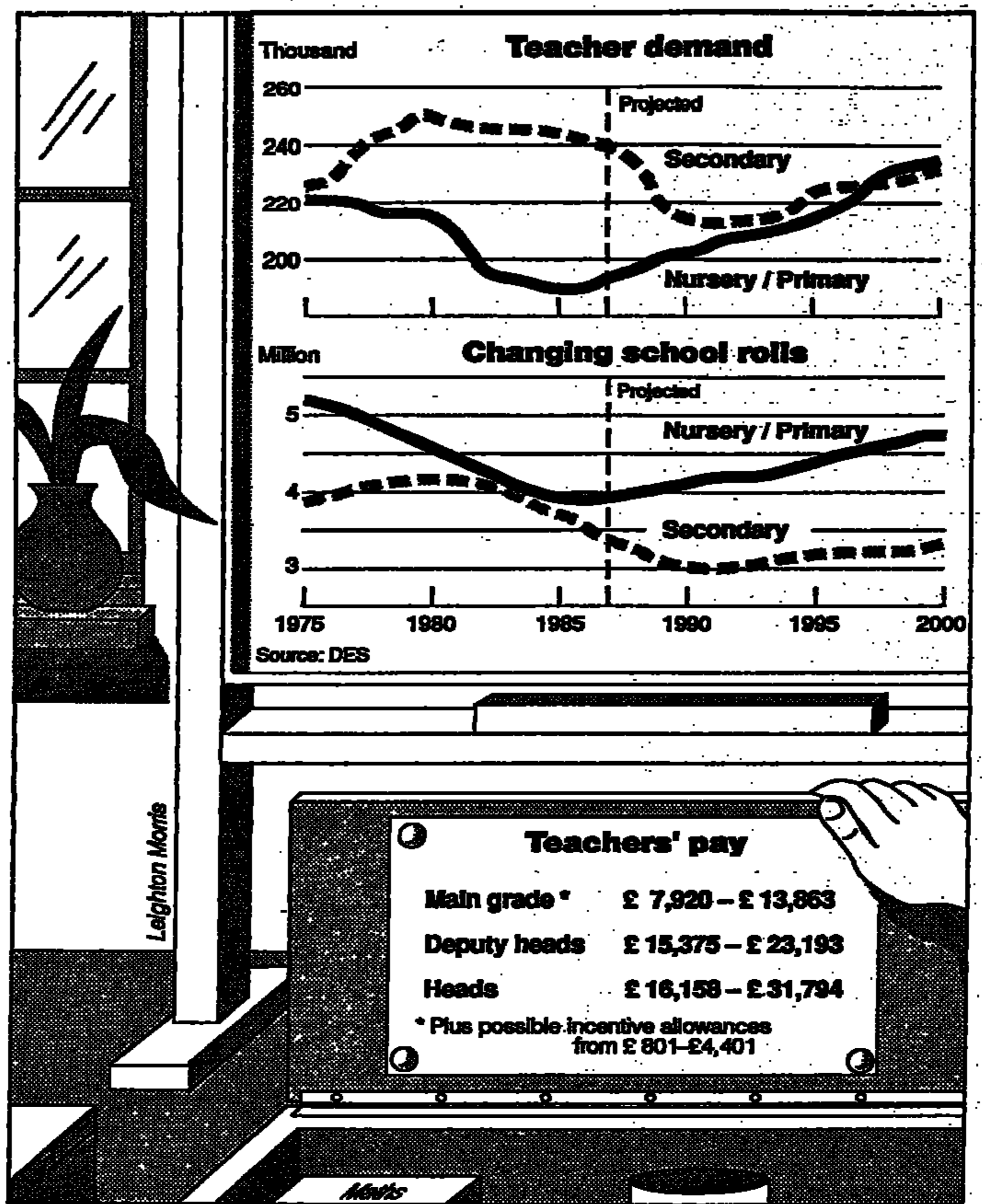
A General Teaching Council would find it difficult to deal with the incompetent, as opposed to the scandalous teacher. Yet the existence of too many mediocre and poor teachers is at the root of the lack of public respect. In its report on secondary schools in the 1980s released in July, the schools inspectorate was willing to grade only two-thirds of classroom experience as satisfactory.

Mr George Varnava, head of a girls' comprehensive at Lambeth, covering a large swathe of Brixton in south London, is optimistic, arguing that teachers are going through a period of clarification.

In his view, teachers had fallen into a philosophical muddle, seeing themselves as social workers or policemen as much as teachers. He had got used to being phoned after school hours by local shopkeepers reporting one of his pupils for shop-lifting.

The new framework in the schools – the defined hours, the national curriculum and so on – will force teachers to concentrate once more on their prime role in the classroom, he argues, forcing others including parents to take on more responsibilities outside school.

The main worry is that it will be a good few years before anyone knows whether Mr Varnava's optimism proves justified.



OBSERVER

Buying Kings and Clarkes

■ If Lawsons have lost some of their value during the summer recess, Kings have certainly gone up as a long term investment and it might not be a bad bet to buy a few Clarkes.

Chancellor Lawson's reputation has dipped as a result of the poor trade figures, the extent of which he did not forecast in his last budget, and the subsequent reliance on repeated rises in interest rates. At present, one hears a lot of people saying that perhaps the Prime Minister was right after all in resisting his attempts to tie sterling to the D-Mark. He has thus moved from being one of the very few senior ministers whom it would be almost impossible to sack to one whose departure might just mark the end of of another political chapter. Certainly he has passed the point where he could make a dramatic policy resignation.

Yet one wonders. Possibly recent events have given him a new challenge. If the interest rates policy works, Lawsons could be back with a bang and there could even be a run on Thatchers. So hold on.

Kings have been worth buying for two reasons. One is that he is one of the very few Northern Ireland Secretaries not to have wimped about the impossible nature of his task nor about being there too long. The Prime Minister has become very dependent on him and there is no obvious replacement. The other is the Tory system for electing a leader. It allows for a third ballot which none of the candidates with strong partisan support in the Party might win. King could emerge simply because nobody has very much against him. That has been the case for some time; he is looking a much stronger candidate now.

Clarkes have strengthened partly because Kenneth Clarke, the new Health Secretary, is only 48 and may outstay his older rivals. He has also been given one of the most difficult jobs in the Cabinet, yet may have the resources to improve the Health Service. Not least, he stayed on holiday during a pseudo-crisis on nurses' pay. Note, too, his Midlands background. There is something solid about him, to which the Tories may one day turn.

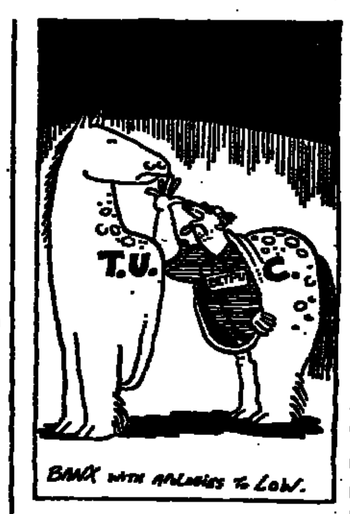
No half Nelson

■ The Irish are looking for a new monument – something to replace Nelson's Pillar, which was built in 1808 and was a kind of concrete manifestation of the English presence in Ireland. The Pillar in Dublin was a symbol of the second city of the British Empire. All trams led to it and all distances were measured from it. It had a similar fame, form and function to Nelson's Column in Trafalgar Square.

During the 1916 Easter Rising a rebel rifleman on the roof of the adjacent General Post Office destroyed most of the Admiral's nose with a bullet. To commemorate the 50th anniversary of the Rising republicans blew up the edifice.

Suggestions for a replacement are now on view at the General Post Office. Shane O'Toole, the exhibition's organiser, says that he hopes there will soon be a monument that will do for Dublin what the Eiffel Tower has done for Paris and the Statue of Liberty for New York.

Among the exhibits are a tower "inspired by the structure of a mayfly wing", a 100 feet high bricklayer's hod and a millennium arch that draws heavily on the Arc de Triomphe. Most observers agree, however, that nothing on show would match the grandeur of the original Pillar.



Even if there were, a new monument would not be built since no public funds are available. The purpose of the exhibition is mainly to raise the level of public debate and awareness of the past.

Meanwhile, the old site remains vacant, save for a small litter bin lurking in the shadow of the nearby British Home Stores.

Musical bids

■ The most venerable of London's small band of music publishers, Novello & Co, has become subject to takeover manoeuvres.

Novello has been a member of the Granada group of companies since 1970. After several months of rumours, employees received a letter 10 days ago from the Novello chairman and Granada deputy chairman, Sir Denis Forman, in which they were told that negotiations were under way for a sale to the music and magazine publishers, Filmtrack.

The prospect of such a well-known name disappearing from the scene has prompted at least two consortiums to mount rival bids, one of them supported by members of the Novello family, whose forebear Vincent Novello started music publishing in the early 19th century.

Novello has a large catalogue of living composers, though few of them are household names, and one of the brightest prospects, Judith Weir, recently defected to a rival. For many years the company was sustained by its sales of Elgar's music. When the copyright lapsed in 1984, income had to be found from other sources. That has not been easy, and anyone taking over will have some hard work ahead.

The attractions for a buyer, however, are the extensive hire library, serving a vast band of amateur orchestras and choral societies, still keen to put on Handel's Messiah as an annual event, and the two journals owned by Novello, The Strad, which caters for violinists, and Musical Times, founded in 1844.

Filmtrack currently publishes the rival Music and Musicians. If the proposed deal goes through, a merger between that and Musical Times seems inevitable: hence the counter manoeuvres.

Popular Ladas

■ Some people say that it is not a Soviet-made Lada with a a sun roof that is known as a skip, but a Skoda convertible. A Lada with twin exhausts is normally called a wheelbarrow.

We are also told that a lot of Ladas have started appearing in Liverpool as well as Ireland. In both places the line is: "Why does a Lada have heated rear windows?" Answer: "To keep your hands warm when you're pushing it."

And again: "How do you double a Lada's value?" "Put in a gallon of petrol."

David Owen charts the surge of Canadian investment in the US

Reaching across the parallel

Bloomingdale's, the Harrods of New York department stores, Battery Park, the Canary Wharf of Manhattan redevelopment projects, and Texas-based Zale Corporation, the largest jewellery retailer in the US, appear at first glance to have little in common. In fact, all are owned or controlled by Canadians. So are the leading dairy producer in New York, the third largest bank holding firm in Illinois, and the largest school-bus operator in North America.

Canadian investment capital has been pouring out of the country at an accelerating pace for nearly 15 years. Well over half of it has been earmarked for the dynamic and inviting US market. All the most powerful Canadian business dynasties, from the Bronfmans to the Thomsons, from the Reichmanns to the Desmarais, now boast significant holdings in Canada's southern neighbour.

The underlying reasons fall essentially into two categories. First, an increasing number of Canada-based corporations have outgrown their relatively limited 25m-strong domestic market and been driven to look farther afield in pursuit of fresh expansion opportunities. Second, the vast (12 times larger), dynamic and comparatively open US market is very much the obvious new front for such companies to attack – the more so since the two countries are also culturally and geographically close. Despite Canada's huge expanse, no fewer than eight out of ten Canadians live within 100 miles of US soil.

Throughout the 1980s, intense competition for foreign investment dollars among job-hungry US states and local authorities has provided a further incentive to invest in the US market. A resurgence of protectionism in some sectors has had a similar effect, encouraging companies which may have been content to export to the US market to establish production plants as a means of sidestepping real or threatened trade barriers.

Yet the still unratified US-Canada bilateral trade agreement, which promises to eliminate most remaining tariffs on trade between the two countries by the end of the millennium, seems also to be encouraging investment. The successful negotiation of the pact has already been followed by a string of statements by Canadian companies portending future US investments. Seagram, one of the world's three largest drinks company, John Labatt, the Ontario brewing and processed food conglomerate, Dominion Textile, the Montreal fabric firm, and Stelco, the steelmaker, have all joined Campeau Corporation in expanding their interests south of the 49th Parallel (which marks the long US-Canadian border) in recent months.

The emergence of Canada as a significant exporter of capital to the US is a comparatively recent phenomenon. In 1975, the value of Canadian direct investment there totalled no more than C$ 5.6bn. At that time, the high level of foreign – particularly American – ownership of Canadian corporate assets was of more immediate interest. (Foreign ownership of domestic business remains higher in Canada than in any other industrialised country.) Since then, an expanding band of Canadian multinational corporations has augmented its US holdings at a rapid rate.

This investment has taken a variety of forms. Many Canadian corporations, in the manner of Mr Campeau, have expanded their US holdings by dint of publicity-grabbing mergers and acquisitions. Such deals have included the $550m takeover in 1986 of Texas-based Zale Corporation by Toronto's Peoples Jewellers, and the $880m purchase two years earlier by Alcan of Atlantic Richfield's aluminium assets. John Labatt has also been a prominent buyer of American companies, having swallowed six sizeable US food firms including Pasquale, an Alabama-based pizza-maker, in recent years. All told, Labatt's US assets tripled to C$ 351m in the three years to the end of fiscal 1986. Alcan's US assets expanded just as fast over the 10 years to 1987.

Other Canadian firms, like Seagram and Olympia & York, have expanded south of the border through major equity investments. In its year ended January 31, 1987, Seagram's 23 per cent interest in Du Pont, the chemicals company (mainly acquired in 1981), accounted for more than 48 per cent of the company's overall assets. Including the drinks division, a hefty 71.5 per cent of Seagram's assets were located in the US at that time. Since then, the company has added Tropicana, the upmarket US fruit juice manufacturer, to its quiver of brands.

The Reichmann family's Olympia & York, which last year accumulated a large minority stake in Santa Fe Southern Pacific, the Chicago-based railway and resources firm, is perhaps better known for its shrewd US property acquisitions. Since 1984, the secretive, orthodox Jewish Reichmanns have been the largest private owners of office space in New York. *At the end of 1986, property accounted* for about 17 per cent of all Canadian direct investment in the US.

Plant construction and expansion has also played a role in augmenting the value of Canadian assets south of the border. Northern Telecom, the Ontario telecommunications company, provides the best case study: the firm's US operations have grown spectacularly during the past decade, despite its avoidance of the type of takeover activity which has made Mr Campeau's name. Since 1977, the value of its US assets has soared from just over $100m to $1.8bn.

Of course, Canadians have not been alone in recognising the US market's huge potential. The upsurge in Canadian investment is part of a global trend. In fact, over the 10 years to 1985, the average annual increase in the value of Canadian investment in the US – at 20.3 per cent – was marginally below the corresponding 21.4 per cent figure for all countries. This was principally due to the rapid increase in new Japanese investment. Since then, would-be Japanese and European purchasers have continued to benefit from the depreciation of the dollar against their own currencies. This has made US acquisitions more affordable for them. In 1986, Canada ranked fourth among all foreign direct investors in the US, behind the UK, the Netherlands and Japan, and narrowly ahead of West Germany.

It is possible, however, that the effects of the free trade agreement, *coupled with rising US concern over* the rate at which domestic companies are being snapped up by foreign buyers, may allow Canada to emerge in the 1990s as the pre-eminent foreign buyer of American assets.

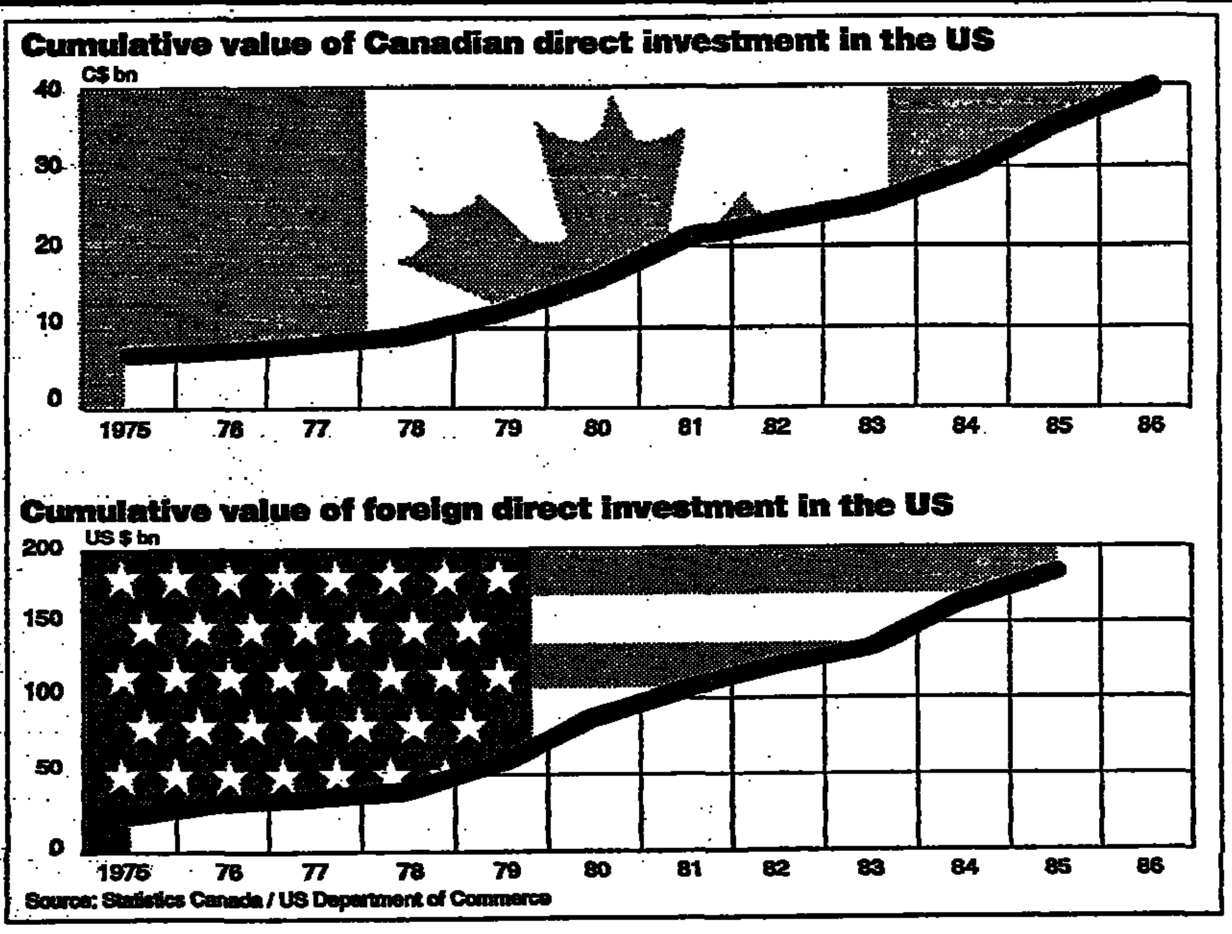
For one thing, the trade pact promises to spark a renewed burst of Canadian investment, this time from a second tier of smaller companies. They are mindful of the need to increase efficiency ahead of the greater competition at home which the gradual elimination of tariffs would produce.

Examples of interested companies include Magna International, the car parts manufacturer, and a string of trust companies and financial conglomerates, such as Trilon and Power Financial, which are being lured partly by the prospect of bargains in the financially-troubled savings and loan sector. More Canadian companies are expected to turn their gaze south once the trade pact is finally ratified.

In the longer run, however, the free trade agreement's most important role may be to protect would-be Canadian investors from any trend towards more restrictive foreign investment regulations in the US.

In a nutshell, the pact enshrines the principle of national treatment towards bilateral investment in the North American sub-continent. In the words of the agreement, the US and Canada "shall accord to investors of the other Party treatment no less favourable than that accorded in like *circumstances to its investors.*" This means that with the exception of certain exempted areas, including communications, oil and gas, uranium and transportation, regulations that discriminate against investors from the other party would not be allowed.

Such an undertaking may appear to be of little importance at a time when the US Administration's position, as articulated by President Reagan in 1983, is that "international direct investment flows should be determined by private market forces and should receive non-discriminatory treatment." But its value would become very clear should US attitudes (and legislation) change. If the trade deal is ratified, the US will effectively be perpetuating its open-door policy towards Canadian investment – even if concern at rising levels of foreign ownership were to prompt a reassessment of attitudes towards outside investment in general.



LOMBARD

A history lesson for Mr Botha

By Michael Holman

THE HISTORY of Rhodesia – now Zimbabwe – may provide President P.W. Botha of South Africa with food for thought. The rise to power of Ian Smith, last prime minister of Rhodesia, and the downfall of his predecessor, Sir Edgar Whitehead, is a cautionary tale.

For Mr Smith and the Rhodesian Front (RF), substitute Mr Andries Treurnicht and the South African extreme right wing Conservative Party. Put Mr Botha in the place of Sir Edgar Whitehead and the United Federal Party.

Sir Edgar tried to combat riots in black Rhodesian townships in the 1950s with a combination of a state of emergency, a new constitution and a promise to repeal the Land Apportionment Act, which divided the country into black and white areas. He was *trounced by the RF in the 1962* general election. His party had lost touch with white Rhodesian grass roots, and woefully underestimated the impact of the Rhodesian Front's racist appeal.

Yet to many the UFP had seemed firmly in control. Its greatest challenge appeared to come from the rise of black nationalism. The 1959 state of emergency, detention of nearly 500 black leaders and banning of the leading black party did not stop further widespread riots breaking out the following year. The UFP acknowledged that it was time to reassess its paternalistic vision of "partnership" between black and white (like a horse and rider, said Sir Godfrey Huggins, Whitehead's predecessor, in a singularly unfortunate turn of phrase).

The new constitution, introduced in 1961, gave blacks 15 guaranteed seats in a 65 member Rhodesian parliament. A complex electoral system held out black rule as a distant possibility. But black politicians dismissed the reforms as too little, too late. Most whites thought it too much, too soon.

In early 1962 the right wing had regrouped as the Rhodesian Front – and stunned the pundits a few months later. From an initial electoral base of white farmers and white blue-collar workers, the RF consolidated power. The Rhodesian establishment was purged within months: senior civil servants were replaced; radio and television brought under state control; the loyalty of police and army officers vetted, all in preparation for the unilateral declaration of independence (UDI) on November 11, 1965. The RF won every white seat at subsequent elections. Ian Smith's 15 year premiership of Rhodesia was ended not by the ballot box but by war – and international sanctions.

It can be dangerous to draw parallels with present-day South Africa. But from the important common factor – a white minority determined to resist black rule – there may emerge insights into possible political developments there.

Of course Mr Botha's cautious reforms fall a long way short of what the Rhodesian UFP attempted. But these reforms have none the less antagonised and galvanised his *own right wing, raising the* possibility that Mr Botha and his National Party will go the way of Sir Edgar Whitehead and the UFP.

Like the UFP, the National Party is embarking on reforms which alienate many white voters on the one hand, and on the other fall far short of satisfying black aspirations. Like the UFP, the National Party introduced – in 1984 – a new constitution (based on a tricameral parliament), which broke new ground but offered no solution. Like the UFP, the National Party is discovering that a crackdown on black opposition does not win right wing voters once they have lost confidence in government's general direction.

South Africa's National Party (which marked its 40th year in office last May) has lost direction. So demoralised are some supporters that in a number of constituencies the party is having difficulty in finding candidates for the municipal elections this October.

These elections could prove a resounding success for South Africa's extreme right wing Conservatives. Unless Mr Botha can find a way of postponing indefinitely the next general election – due to be held by 1990 – the National Party's days may be numbered.

And then it would be Mr Treurnicht, not Mr Botha, in charge of white South Africa – on a painful path to reality already trodden by Ian Smith and his supporters.

LETTERS

An alarming attack of the disease called enterprise

From Sir Derek Alun-Jones, Chairman, Ferranti.

Sir, Hugo Dixon's article covering "the crucial questions facing the DTI over CT2" (August 27) touched too briefly on the dangers facing the UK.

Some years ago the Ferranti company appears to have suffered a mild attack of a disease called enterprise – fortunately rare until recently in this country, but prevalent in Japan and some other parts of the world. The company then decided to spend its own money recklessly in pursuing a new idea in the telecommunications field: the CT2 technology.

This work led Ferranti recently to approach the Department of Trade and Industry (DTI) for a licence to introduce the equipment it had developed, and start the world's first public telepoint service here, in the UK. (Apparently Ferranti took the view that, having conceived the idea for such a service, and developed the technology to put it into service, it had some sort of right to be given a licence to do so.)

If the DTI had fallen for this proposal it might have been a disaster not only for our revered monopolist network operator and duopolist cellular operators, but also for others who have not spared themselves over decades in supplying the necessary hardware for these operators.

All would have been exposed to the danger that such a new service could have proved attractive to the public (whose judgement can sometimes be unreliable in these matters). The service might have competed with British Telecom (BT) and the cellular networks in many respects, forcing them to consider improving even more their present near-perfect services – and their already very low charges, to the point that their return on capital could have been eroded below the present niggardly 30 per cent or so.

It certainly would not have been fair to allow this little-known company, Ferranti, to go forward, attacking the profitability of national institutions ahead of all those who had not wasted precious national resources developing this technology, before being invited to do so. A competition had to be held to check that more deserving licencees could not be found among those whose existing businesses might be threatened by such a new service, or at least had not worked secretly on their own initiative to give themselves an unfair advantage.

This underlines how careful we have to be to ensure that over-clever little companies do not contrive to establish market advantages for themselves over important national assets like BT.

A competition will therefore be held. Dangers, however, still exist. The DTI is conducting the competition over a short time-scale, and seems too little concerned about the important matter of standards.

As you will readily appreciate, Sir, standards are not only important reasons for general delay, but also necessary in the UK to ensure that the British public does not become confused by being offered two separate services. (The fact that the public seems not to have noticed the confusion which currently exists – in that citizens cannot swap between Cellnet and Vodaphone at will – should be disregarded, because the public is notoriously stupid in these matters.)

These Ferranti chaps – quite irresponsibly – were trying to start before a British standard had been debated at length and properly agreed. They argued that this would delay them – and, anyway, that the Europeans (who also might be concerned by this British company trying to set a service before they are ready) would then argue for everything to be further delayed until a pan-European standard had been agreed.

Properly conducted, this standards issue could be used to delay the Ferranti fellows by at least three years. I hope, Sir, that we can rely on GEC and others to work with us on this.

We can justly applaud progress made in thwarting the threat so far. But much remains to cause concern. Apparently Ferranti – so far from seeing the error of its ways – is still actually going to seek a licence for itself and argue that it should then be allowed to proceed immediately, providing it undertakes to meet any UK or European standard when imposed.

In this situation, the only real remaining hope is Oftel (Office of Telecommunications). Regrettably, that organisation has not shown itself wholly reliable in the past. It sometimes forgets what I would regard as its prime duty: protecting the networks from any new competition. (You will remember, Sir, how Oftel forced BT to allow all that non-BT manufactured equipment on to the market so quickly. How some of us were not electrocuted in mid-telephone call, I do not know ...)

Can we rely on Oftel not to ignore the sage, disinterested advice of all those who may be disadvantaged?

Instead of taking the obvious, prudent course of only recommending the grant of licences to sound operators of the network or cellular system, so that this disturbing new service can be introduced in a way which will minimise any adverse effects on their business – and on a time-scale that will offer at least equal advantages to our European friends – Oftel may still recommend Ferranti for a licence too.

Even worse: Oftel may mischievously not recommend licences for BT, Racal *et alia*, thus tyrannically forcing them to compete with the new service only on price and service. It may seek to excuse this by pointing to the – quite inadequate – 30 per cent of telepoint revenues which BT will get anyway, for the complicated business of allowing its calls on to the network. You can rely on the Ferranti people to put forward the argument that no licencee should have the benefit of already owning the network or having a cellular licence if you want fair competition.

It may seem inconceivable to us, but Oftel may not even insist that Ferranti wait for a UK or European standard to be properly debated. Worst of all, Oftel may recommend Ferranti for the only immediate licence – unreasonably refusing a licence to any other applicants until they, too, can demonstrate fully trialled equipment, and are actually in a position to operate their service.

If that were to happen, we are in serious trouble. Here, in the UK, Ferranti will start the first public service in the world; inconvenience the general public with more choice; harry BT and the cellular services into reducing prices; and annoy many of our international friends by seeking to exploit their position overseas. If Ferranti make large profits from the service, it may use these to do even more dangerously innovative things, thereby quite ruining the UK's national culture.

You may feel, Sir, that as chairman of Ferranti I should be doing more to ensure that these rogues do not outwit the forces with legitimate interests to protect. Unfortunately, the electronics industry has adopted this terrible de-centralised management style; I am quite powerless to stamp on their enterprise.

In the circumstances, I can only call upon you to rally the British Government, Oftel, and all the great companies of this important industry to foil the rascals. Should we fail, we could have enterprise breaking out all over the nation.

Derek Alun-Jones,
Chairman, Ferranti International Signal,
Millbank Tower,
Millbank, SW1

FINANCIAL TIMES
Monday September 5 1988

Janet Bush
on Wall Street

A market floored by tradition

IT HAS always been a heresy to suggest that New York should follow London into upstairs dealing rooms to trade stocks, and so deny tourists the awe experienced watching the bedlam of a stock exchange floor safely behind glass.

On March 2 1987, the London Stock Exchange announced it was to close its trading floor and rely exclusively on dealing via phones and screens.

The New York Stock Exchange responded with what was widely read at the time as a fit of self-evidently absurd defensiveness by banning its member firms from making markets in roughly 200 securities listed on both exchanges outside Wall Street hours.

The reason it cited was that an exchange without a floor is not recognised under NYSE rules. As it turned out, screams of anti-competitiveness by big US securities houses, just digging their heels into the London market, forced the NYSE to reverse its decision only days later.

Many New York Stock Exchange members are still more than loyal to the use of the floor. Even Professor Merton Miller of the University of Chicago, a renowned expert on derivative products and proponent of technological change, says that the NYSE specialist system seemed to have been stumbled on by accident but nevertheless works quite well.

There are others, however, who believe that the future efficiency of markets lies in full automation and that floor trading is obselete.

Three of the most notable proponents of fully electronic markets such as London and highly automated markets such as the home-grown Nasdaq over-the-counter market are Mr Junius Peake of the New Jersey-based consultancy group Peake/Ryerson, Professor Morris Mendelson, professor of finance at the Wharton School of the University of Pennsylvania, and Mr R.T. Williams, president of another New Jersey consultancy, R. Shriver Associates.

Together known as PMW, they have been campaigning for a computer-based trading system since at least 1978. One or other of the triumvirate pops up on almost every occasion when converts may be gathered. One such occasion was when copies of the Brady Commission report on the October crash were handed out by the New York Federal Reserve one snowy New York day. PMW were there.

Given discussions within the industry about how to set up systems to cross portfolios of shares in upstairs dealing rooms, PMW may be some 10 years before their time.

They are unequivocal that more automation, not less, is what is needed in US markets. "We fear the loss of this nation's capital markets to foreign shores in systems not hamstrung by obsolete technologies and policies," they say.

Further, they argue that the crash of 1987 demonstrated a lack of liquidity and they quote Mr Stephen Wunsch of Kidder Peabody who concluded that this dearth of liquidity demonstrated "the triumph of the use of automation by those who require liquidity (the clients) over the non-automated processes of the assigned liquidity providers (specialists and registered market makers)."

They conclude that the only solution is a fully integrated, fully electronic secondary market in equities and their derivatives. "With today's technology it is truly possible for the first time in history to create a financial asset trading system which allows qualified buyers and sellers anywhere in the world to meet in a non-geographic electronic trading arena," Mr Peake said in a speech last month.

The system PMW propose would provide equal, instant, real-time market data to all market participants; similar access to and participation in the trading arena by all; no restrictions on providing market-making functions by any participant; the required pricing of all orders by principals or their agents before they arrive in the trading arena; synchronous real-time trading systems for underlying and derivative instruments; continuous trading in all instruments during market hours; and complete integration between trading and clearing systems.

Mr Peake is positively lyrical sometimes. "What's past is prologue," he quotes from The Tempest, the story of the wrecking of an English ship on the reefs of Bermuda. This is prophetic indeed, he says. Bermuda is home to the world's first fully electronic exchange – Intex – which he founded.

Kurds flee Iraqi army into Turkey

By Jim Bodgener on the Iraq-Turkish border

THOUSANDS of Iraqi Kurdish guerrillas and civilian refugees continued to seek refuge in Turkey over the weekend from the brutal campaign waged by Iraq's fifth army against remaining Kurdish dissidents in northern Iraq.

Some Kurdish estimates put the numbers of refugees already in Turkey at 150,000, though the true figure is probably nearer 100,000. These can only be estimates, given the many groups of between 1,000 and 5,000 refugees which are sheltering in remote valleys accessible only by rough tracks and goat paths.

Many interviewed said that they were from the Kurdish Democratic Party (KDP), the largest of the Iraqi Kurdish *peshmerga* (guerrilla) groups, which is led by Mr Mesud Barzani.

Many refugees are camped in valleys and river hollows within sight of Iraqi blockhouses on a mountain slope barely more than 1km away.

The Turkish Government had until late last week been content to let the military handle the refugee situation. But the growing mass of those on the border seeking entry forced a concerted military and civilian response.

Mr Turgut Ozal, Prime Minister, said the borders would be opened on humanitarian grounds. The Foreign Ministry repeated this the next day, but stressed that Turkey had no legal obligations under the 1953 Geneva convention and its 1967 protocol to accept the refugees. The ministry said Turkey had reserved its discretion over its non-European, southeastern borders.

At the same time, however, Turkey last week refused Iraq permission to follow up the guerrillas under a hot pursuit agreement reached in 1984. Turkey is also unlikely to ratify the annual agreement when it expires.

At the end of the week, in a clear bid to defuse the tension on the border, Turkey offered temporary asylum to Mr Barzani, the KDP leader.

It was also announced over the weekend that the refugees would be moved away from the initial reception points to more permanent camps in less sensitive areas in Turkey's southeast. Until the refugees reached the reception areas, their passage into Turkey was under the tense and mistrustful eyes of Turkish troops. The gendarmerie's elite, blue-bereted commandos patrolled the border area, and were airlifted to meet the groups wherever they are detected.

The treatment of the refugees appeared, however, to follow the Turkish Government's word that they were being accepted on humanitarian grounds.

Those seriously wounded who had managed to cross the line were being treated in Turkish hospitals and clinics as far away as Cizre, 100 km west of the fighting. Refugee accounts of Iraqi chemical bomb attacks were corroborated by a Turkish military doctor in a reception area near Cukurca, who said 300 of its 5,000 inmates were suffering from the after-effects of such attacks.

Initial contacts between the Turkish military and the incoming refugees seemed to vary in degrees of suspicion of the numbers of active-service peshmerga shepherding them. At one large collection point, however, with lots of civilians already ensconced in makeshift shelters, relations between troops and refugees were friendly.

Iraqi Kurds wait to be checked by Turkish commandos after crossing the border from Iraq yesterday. Turkey has said it will accept the refugees on humanitarian grounds

LDP poll victory a setback for critics of Takeshita tax plan

By Ian Rodger in Tokyo

JAPAN'S ruling Liberal Democratic Party (LDP) won a regional election yesterday, dashing opposition hopes that the vote would show strong public antipathy to the Government's tax reform plans.

Tokyo political analysts said at the weekend, however, that the fate of the tax reform plan, on which Prime Minister Noboru Takeshita has staked his political future, was still uncertain. Opposition both inside and outside the LDP remained strong, they said.

The campaign to elect a new governor in Fukushima prefecture attracted national attention because of a bizarre internal row within the LDP which resulted in two conservative candidates running.

One of them, Mr Toshio Hirose, then made a pact with the opposition Japan Socialist Party to run on an anti-tax reform platform, thus attempting to turn the election into a plebiscite on tax reform.

LDP leaders officially renounced both candidates. In fact however, they put considerable effort into the campaign of Mr Hirose's rival, Mr Eisaku Sato, vice minister of finance and holder of a seat in the upper house of the Diet, Japan's parliament. They also apparently prevailed on Mr Hirose to play down the tax issue in his campaigning.

Last year, an unexpected LDP defeat in a by-election in Iwate prefecture was interpreted as a rejection of the tax reform proposals then being advanced by former Prime Minister Yasuhiro Nakasone, and it forced the Government to withdraw the plan.

Mr Sato was declared elected last night at 11pm, Japan time, after 74 per cent of the vote had been counted, with 55 per cent of nearly 900,000 votes. Mr Hirose received a respectable 40 per cent. The LDP also easily won the by-election to fill Mr Sato's Diet seat. Analysts said a record turnout of over 80 per cent of voters worked in the LDP's favour.

Mr Takeshita and other ministers of the Government began a series of speeches around the country

S Korea to make the won fully convertible

By Maggie Ford and Stephen Fidler

SOUTH KOREA is to make its currency, the won, fully convertible in the next few months. This would be an important step for the country's maturing economy since it would remove restrictions on the won's use in the foreign exchange market and in the settlement of many transactions.

The move will be signalled by the signing by the Government of the International Monetary Fund's Article Eight, which obliges signatory governments to allow unrestricted foreign exchange dealings for current transactions.

A convertible won will ease a shift towards a market-determined exchange rate from the present "managed float" system under which the Government, in effect, sets the level of the currency.

The decision is the first to emerge of a number of proposed reforms to the financial sector of the economy, although there is still doubt as to how far any other reforms will go.

Sixty-three of the IMF's 151 members have signed Article Eight. Members are encouraged, but not obliged, to be signatories and the move is usually taken as an indication of a maturing economy. The most recent country to sign was Indonesia, in May.

A senior Government economist in Seoul said that the Government believed that the problems in management of the country's large current account surplus had made the need for financial sector reform an urgent priority. The surplus more than doubled last year to almost $10bn.

Apart from the introduction of a liberalised foreign exchange market, this also dictated acclerated reform of the capital markets and significant changes in the way financial institutions operate, he said.

A battle has been raging over financial liberalisation among business, the central bank, the Ministry of Finance, commercial banks and government planners. The argument centres on how much control the Government should surrender to market forces, and how much independence should be granted to the the Bank of Korea.

Referendum setback for Hawke

By Chris Sherwell in Sydney

AUSTRALIAN voters, in a vigorous display of their underlying conservatism, have decisively repudiated four proposed amendments to the country's constitution.

By a margin of two to one, they voted in a weekend referendum to reject changes which promised fewer and fairer elections, recognised the status of local government, and entrenched certain legal and human rights.

Most support went to the proposal demanding that constituencies have equal numbers of voters, but only 37.4 per cent voted Yes. Just 32.8 per cent agreed with the proposal promising four-year parliamentary terms instead of three.

The overall outcome, some believe, makes constitutional reform unlikely before the 21st century.

Mr Bob Hawke, the Labor Prime Minister, yesterday admitted his disappointment and blamed the opposition Liberal and National party coalition, which had urged a No vote on all four questions.

Constitutional change needed bipartisan support, Mr Hawke said, but the conservative parties were so divided and narrow-minded they were incapable of broader considerations.

Mr John Howard, the Liberal leader, in turn blamed the Government and drew encouragement from the apparent blow it had suffered. The parties' standing is due to be tested again in next month's Victorian state election and the by-election in the Brisbane constituency of Mr Bill Hayden, Governor General-elect.

Mr Lionel Bowen, the Attorney General who led the Government campaign, acknowledged that constitutional change in Australia appeared to be a lost cause.

"I don't think people approve of referendums. I don't think they trust the words. . . they say there must be another way of doing this without asking us," he said.

He added: "We must look a bit unusual in the world. We're a nation which says you don't have to entrench rights in the constitution, you don't have to give four-year terms this way. . . [*But*] there's no other way."

Bush steals opening march

Continued from Page 1

so – who ran Ms Geraldine Ferraro's vice presidential bid in 1984 – should help the Dukakis team adjust to the roughhouse atmosphere of a presidential campaign. Mr Sasso may also lift Mr Dukakis psychologically. Just as Mr James Baker, the former US Treasury Secretary, clearly helped Mr Bush when he took over as campaign manager last month.

This week, the Dukakis campaign will air its first TV adverts under the theme of "Good Jobs at Good Wages in the Good Ole USA."

The Democrat message is pitched unashamedly at middle-class white voters.

This may upset the Rev Jesse Jackson, the populist left-winger whose campaign role remains undefined; but it amounts to an inevitable backlash to the Democrats' loss of four out of the last five presidential elections.

Soviet corruption trial

The disgraced son-in-law of Leonid Brezhnev, Yuri Churbanov, will face the Soviet Supreme Court today in a corruption case expected to put the entire Brezhnev era on trial.

Secret weapon unveiled

A secret weapon, Smart Weapon Anti-Armour, which will be used to destroy tanks was unveiled at the Farnborough Air Show.

WORLD WEATHER

		°C	°F			°C	°F			°C	°F			°C	°F
Ajaccio	S	26	79	Dubrovnik	S	28	82	Malta	S	34	93	Rhodes	S	31	88
Algiers	S	32	90	Edinburgh	R	15	59	Manchester	R	11	52	Rio de J'o	C	21	70
Amsterdam	R	13	55	Faro	S	27	81	Manila	-	—	—	Rome	F	28	82
Athens	S	30	86	Florence	C	19	66	Melbourne	-	—	—	Salzburg	R	13	55
Bahrain	F	39	102	Frankfurt	R	15	59	Mexico City	F	22	72	San Francisco	S	26	80
Bangkok	F	35	95	Funchal	R	25	77	Miami	C	31	88	Seoul	S	29	84
Barcelona	S	28	82	Geneva	R	13	55	Milan	F	23	73	Singapore	C	31	88
Beirut	F	31	88	Gibraltar	F	24	75	Montreal	C	25	77	Stockholm	C	18	64
Belfast	F	13	55	Glasgow	R	13	55	Moscow	C	20	68	Strasbourg	F	19	66
Belgrade	C	29	84	Guernsey	S	15	59	Munich	R	12	54	Sydney	-	—	—
Berlin	R	17	63	Helsinki	C	17	63	Nairobi	C	24	75	Taipei	C	32	90
Biarritz	C	17	63	H. Kong	F	31	88	Naples	F	29	84	Tangier	C	22	72
Bombay	-	—	—	Innsbruck	R	11	52	Nassau	F	31	88	Tel Aviv	S	31	88
Bordeaux	F	19	66	Inverness	F	18	64	New Delhi	-	—	—	Tenerife	F	26	79
Brussels	R	14	57	Islamabad	F	37	99	New York	R	25	77	Tokyo	F	27	81
Budapest	S	25	77	Istanbul	S	28	82	Nice	S	27	81	Toronto	R	24	75
B. Aires	F	15	59	Jakarta	C	32	90	Nicosia	F	38	100	Tunis	S	37	99
Cairo	S	35	95	Jersey	F	16	61	Oporto	S	19	66	Valencia	F	30	86
Cape Town	-	—	—	Jo'burg	F	15	59	Oslo	R	15	59	Venice	S	19	66
Caracas	C	28	82	Lima	-	—	—	Paris	F	16	61	Vienna	C	21	70
Casablanca	F	25	77	Lisbon	C	22	72	Peking	-	—	—	Warsaw	F	23	73
Chicago	C	20	68	London	C	16	61	Prague	R	14	57	Washington	-	—	—
Cologne	F	19	66	Los Angeles	F	40	105	Reykjavik	F	11	52	Zurich	F	15	59
Copenhagen	C	17	63	Luxembourg	F	15	59								
Corfu	S	31	88	Madrid	S	24	75								
Dallas	-	—	—	Majorca	S	29	84								
Dublin	F	14	57	Malaga	S	30	86								

Readings at mid-day yesterday

C-Cloudy D-Drizzle F-Fair Fg-Fog H-Hail R-Rain S-Sun Sl-Sleet Sn-Snow T-Thunder

GrandMet raises offer

Continued from Page 1

and GrandMet could not proceed.

In Britain, the Takeover Panel then allowed GrandMet to make a further bid for Irish Distillers but ruled that it could not make an increased offer unless a competitor made a bid.

Warburg, GrandMet's merchant bank, said last night the Takeover Panel had now ruled that the approaches being made by Pernod-Ricard to the board and shareholders of Irish Distillers, in which they sought irrevocable commitments, should be treated as a competitive offer.

The Takeover Panel decision was sharply criticised by Irish Distillers. It said: "This is not the first time in this bid that the Takeover Panel has broken its own rules."

The company prefers Pernod-Ricard as a future partner because the French group would leave the business intact. GrandMet has said that if it was successful it would sell a number of its brands and distilleries.

The Irish Fair Trade Commission, the equivalent ofthe UK Monopolies and Mergers Commission, has yet to report onGrandMet's original bid.

THE LEX COLUMN

London looks better on paper

For the UK domestic investor, all the pressing questions just now are international. There are several practical reasons for this, one being the fact that the FT-SE Index has tracked Wall Street with scrupulous fidelity for the past six months and more. But despite the background of uncertainty in New York and Tokyo, there remains the nagging feeling that UK equities could just be cheap in their own terms.

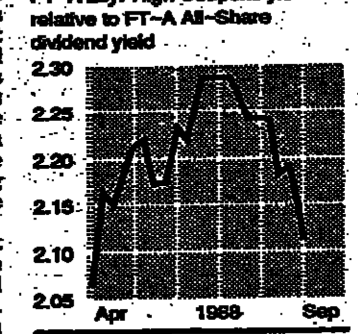
After the setbacks of recent weeks, the ratio between the yield on UK gilts and the yield on equities has fallen to 2.1 times. Over the past dozen years, a yield ratio of 2 has proved a floor on all but a couple of occasions; one such was the immediate aftermath of the crash, when it went to 1.9 (just before the crash, it peaked at a nonsensical 3.3). For a further drop in the ratio to be strictly justified, one of two things must happen – a rise in gilt yields, or a fall in dividends.

The first is certainly possible, though after last week's declines long gilts are probably discounting 13 per cent base rates already. As for dividends, it would take a real hard landing next year to produce earnings growth of much under 10 per cent; and with dividend cover presently calculated by Warburg at 3.2 times, compared with a long-run average of 2.75or so, there is scope for a rise in the payout ratio to make good the difference.

None of this means the UK market is about to go up; for a start, it has paid since the crash to sell into strength, and there is nothing yet in the market's psychology to change that. But it could just be time to start nibbling at long-term value – though it might still be prudent to steer clear of sensitive areas like consumer goods and housing.

Yield ratio

FT-A 25yr High Coupons yield relative to FT-A All-Share dividend yield



British Steel

The growing pile of stockbrokers' research on British Steel may be viewed with a certain degree of cynicism by shareholders in Jaguar. Like that company, British Steel is to be sold towards the top of its cycle, with currencies favourable, and with impressive recoveries all but over. Whileno one ever pretended that Jaguar would not be hurt by a falling dollar or by a squeeze in its major market, the prospect of the company's edging towards losses just four years out was unthinkable.

Similarly, nobody pretends that steel is not a cyclical industry; but Phillips & Drew's latest research suggests that, even if demand turns down, profits need not behave accordingly. The issue is a critical one, especially as world steel demand is expected to fall by 5 per cent the year after next. The argument for British Steel rests on its efficiency relative to its competitors, on the shift in the market towards higher margin steel products, on falling capacity and on the scope for further productivity gains. The case may be strong enough to sway the impartial investor, but British Steel shareholders could not reasonably expect to be bailed out by a bid if things went wrong. A potential predator might be drawn by a name like Jaguar, but scarcely by that of Ravenscraig.

Tokyo listings

Last week's announcement by British Gas that it is to become the 100th foreign company to be quoted on the Tokyo Stock Exchange suggests that the concept of global listing is still gaining ground. In this case, British Gas was honouring an informal commitment made when it placed shares in Tokyo on flotation two years ago; but National Westminster last week also came to the Tokyo market – following Barclays' earlier example by raising £100m – and ICI plans a Tokyo listing in the autumn.

Of the two chief reasons for such a move – corporate PR and fund-raising – the first is still much the most important. The motives, though, can be highly specific. Glaxo aims to improve its penetration of the world's second biggest drug market and attract Japanese research staff. NatWest aims to raise its profile as a Japanese corporate banker and assist County NatWest to exploit its seat on the Tokyo Stock Exchange. If other companies feel that a stock exchange quote does less to address their objectives, the big Japanese brokers are these days on their doorsteps to convince them otherwise.

It is only in the past year or so that Tokyo has been seriously thought of as a source of funding for foreign companies. Barclays and NatWest are something of a special case, since access to capital in different markets helps banks meet the new regulations on capital convergence. But it may well be true that the strength of the yen and the Tokyo market are prompting Japanese investors to look for safe foreign companies with which to hedge their bets. Such capital may not be cheap to raise, and there is always the initial problem of flowback of stock to the country of origin. That out of the way, though, companies can hope that the Japanese will live up to their reputation as long-term holders.

South Africa

The idea of insuring assets presumably comes naturally to the likes of Liberty Life. Last week it followed Rembrandt's lead in isolating its vulnerable South African assets from the foreign ones which it might have to rely on if one day a black government in Pretoria were to opt for nationalisation. Presumably, neither company has any clearer idea than the rest of us of South Africa's political timetable; but, with tough sanctions legislation before the US Congress, it must have seemed a good time to ensure that both companies' South African assets are kept well clear of foreign holdings which might otherwise be caught in the same net.

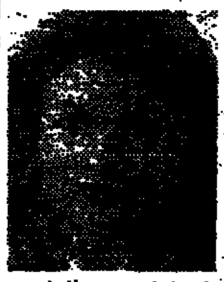
The break is much cleaner in the case of Rembrandt than in that of Liberty Life, which will not be able to domicile its foreign assets offshore for some time to come. And while the latter's reorganisation could well have implications for its relationship with Sun Life, the nature of Liberty's interest in that company is as much of a mystery now as before.

Meanwhile, the news that two South African companies in a week have decided to repackage their foreign interests for political reasons must increase speculation that others could distance themselves from the Republic too, perhaps by splitting their businesses in two, or in the case of DeBeers moving across the border to Gaborone.

FINANCIAL TIMES
COMPANIES & MARKETS
Monday September 5 1988

INSIDE

How the American cookies crumbled



Since Mrs Fields, the US cookie company headed by the eponymous Debbi Fields (left), floated on the London stock market its shareholders have suffered a succession of disappointments. Philip Coggan looks at the generally poor track record of American companies that have chosen the UK for their only stock market quotation, and the image problem US businesses will face if they try to follow this route in future. Page 28

Osaka scores rare victory

Japan's second city, Osaka, scored a rare victory over its long-standing rival Tokyo on Saturday when the competing stock exchanges simultaneously launched stock index futures. To the surprise of securities brokers and the consternation of many in the capital, the Osaka exchange grabbed the lion's share of the trading volume — Y3,300bn (£14.5bn) against Y1,700bn in Tokyo. Page 29

Flaws in the Japanese machine

Nobody's perfect. Japanese manufacturing investment abroad has grown rapidly over the past three years along with the rising yen, prompting Western fears that it will become devastatingly successful competition. But this ignores the fact that the Japanese track record in managing foreign plants is far from flawless. The Business Column, Page 28

Now you see it, now you don't

EURO

The Euroyen bond market has performed a financial vanishing act. The yen once outstripped the dollar as the favourite currency for Eurobond market borrowers, but a flood of new issues has turned into a trickle this year. Reasons include the sense that the yen has peaked against other major currencies and the low interest rates on Japanese securities. Page 27

Market Statistics

Companies in this section

Pernod-Ricard attempts to distil a fighting spirit

George Graham looks at a French drinks group that is trying to spread its reputation overseas

Pernod-Ricard is giving the impression of a typical family company which still has ambitions to play on the world stage but which cannot summon up the nerve to pay the sort of price that ambition now requires.

This judgment, from one Paris banker, may sound a little harsh for a group which owns the world's third largest selling spirits brand and which last year managed to record a net profit margin of 5.7 per cent on sales of FFr12.5bn ($2bn).

Pernod-Ricard's hesitations and contradictions in the last few days over whether or not it would bid for Irish Distillers, however, have done nothing to dissolve the image of a company at a crossroads, which has not yet made up its mind which way to turn.

The group ranks as one of the world's leading wines and spirits producers. Besides its top brand, the aniseed flavoured Ricard with 7.4m cases sold a year, Pernod-Ricard has Pastis 51, another aniseed drink with annual sales of 2.4m cases, and the bitter aperitif drink Suze, with 1.6m cases sold.

Its domestic sales network is cast-iron, which has served it well in recent years, when France has shown a steady growth in the consumption of spirits, compared with a decline in many other major markets.

But the very strength of its implantation in its home market raises the question of where Pernod-Ricard can go next.

For the French wines and spirits division, which accounted for 46 per cent of group sales last year, provides well over 60 per cent of its operating profits. With Société des Vins de France, the wine subsidiary, showing a modest profit after losses the previous year, the vast bulk of the profits came from pastis.

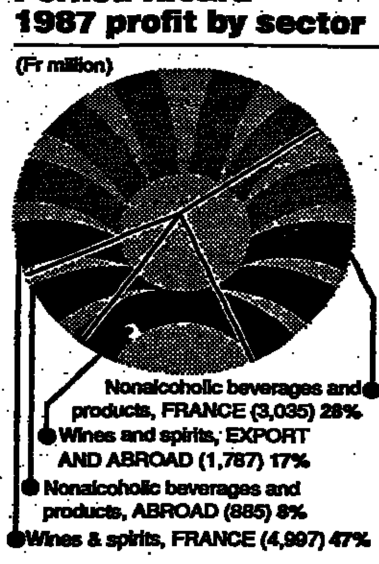
But pastis is a cash cow which is hard to export. Its aniseed flavour does not make headway in many countries outside its native France, and the stranglehold of the Ricard and Pastis 51 brands leaves little room for further expansion on the home market.

Its latest acquisition, a Provençal distillery producing the peach champagne Carlton, has proved to be an outstanding success, but the prospects for growth are limited now that other bottlers are attacking this segment and that Carlton's price has risen close to that of real champagne.

In overseas drinks markets, despite the acquisition in 1980 of Austin Nichols in the US, with its subsidiary Boulevard Distillers and the Wild Turkey bourbon label, Pernod-Ricard has not really made much headway.

Pernod Ricard 1987 profit by sector

(Fr million)



Patrick Ricard, chairman of a drinks group at a crossroads

Pernod-Ricard claims that its Scotch whisky brand, Clan Campbell, is one of the fastest growing whisky brands in the world, but it started from a low base and its success has been largely achieved in the French market.

But the most damaging question over Pernod-Ricard's future is in the soft drinks sector, which it has claimed as the main focus of its diversification.

With licenced brands like Coca-Cola, Fanta, its own Orangina and Pampryl, Pernod-Ricard made operating profits of FFr318m in its domestic non-alcoholic division last year. Non-alcoholic drinks, especially the newly purchased Yoo Hoo chocolate drink company in the US, accounted for most of Pernod-Ricard's 7 per cent rise in sales to FFr5.7bn in the traditionally weak first half of the year.

The group is locked, however, in a legal battle with Coca-Cola, which is seeking to take back its French concessions from Pernod-Ricard as they fall due. These include Fanta, Sprite and Finley tonic, as well as Coke. The lawsuit currently appears to be flowing Coca-Cola's way, and it will regain the concessions in the Vichy, Bordeaux and Orleans areas.

Possibly the best possible outcome for Pernod-Ricard now seems to be the negotiation of compensation from Coca-Cola for the loss of the remaining concessions - stockbrokers' estimates range from FFr1bn to FFr2bn.

But this will mean the loss of around 10 per cent of the group's total sales, and something like 13 per cent of operating profits.

Although Pernod-Ricard has built Coke up to a point where it claims 80 per cent of the French market, Coca-Cola is disappointed by the fact that the French still drink only one sixth "Beaujolais du Texas" as much per head as the Americans.

Pernod-Ricard's other main soft drink brand, Orangina, has been recording strong sales growth in overseas markets, but analysts doubt whether it has much further potential in France and feel it is likely to remain a relatively high priced niche product overseas.

Moreover, the high cost of promotion means that despite rising sales, Orangina is a heavy loss-maker outside France. Mr John Wakely, analyst at brokers Paine Webber, estimates that it will repeat last year's FFr50m deficit in 1988, and even in 1989 he foresees the entire foreign non-alcoholic drinks and products division making a paltry FFr12m operating profit.

Does Pernod-Ricard's new interest in Irish Distillers mean that it has found something better to do with its money than spending FFr645m on a 3 per cent stake in Compagnie Financière de Suez, the banking and investment conglomerate privatised by the French government last year, or buying in 5 per cent of its equity, as it did earlier this year?

To snatch Irish Distillers from Grand Metropolitan, however, even with the board on its side, Pernod-Ricard will need to show that it is more resolute than in the past about hoisting itself into the major leagues with an aggressive policy of external growth.

Time to search for a new misery index

Anthony Harris in Washington

Today is Labor Day, the first public holiday for some months on which it is a pleasure to be outdoors. It is the day on which the summer academic holidays end, on which retailers make their "final" cuts on beach clothes, barbecue grills and 1988 model cars and on which, every fourth year, the US general election campaign officially opens.

It also remains labour's own day, and the union researchers, academics and politicians who support its cause traditionally choose the occasion to publish studies which make labour's case. This year they have come up with two crunchers - a rather over-detailed report from the Economic Policy Institute (EPI) about the stagnant course of real wages, and the great increase in inequality, during the Reagan years. A shorter one, sponsored by the Joint Economic Committee of Congress (JEC), shows why wages have done so badly (mainly a matter of changing industrial structure).

Even the official bureaucracy has joined in, since the official report on poverty from the Census Bureau appeared just before the holiday. It shows that there are more people below the poverty line than there were in President Carter's final year. The Democrats, who have been accused of talking in vague generalities, certainly have more than enough detail now to illustrate the need for change. What is not so clear is what changes would make much difference.

While the findings are all to some extent contentious, there is really no disputing their general conclusions: the opinion polls prove that they are right. On any normal calculus, a government which has presided over the longest peacetime expansion in American history ought to be able to win an election in its sleep. The economy is still growing fast, and the traditional "misery index", the figure which adds the inflation rate to the unemployment rate which was invented by the Democrats twelve years ago to dish President Ford has halved during the Reagan term.

Despite this, the Democrats started with a huge lead; and although Vice-President Bush has since proved a far stronger campaigner than anyone seemed to expect, and the Republicans have had all the media attention since their own convention, they are only ahead by a statistically insignificant whisker. Ordinary Americans, earning the median wage or less, needed no special studies to convince them that the Reagan years have in fact been quite hard ones. We need a new index to measure this dissatisfaction, which is surely not uniquely American.

Have real wages stood still? The point is hotly disputed between the technicians. The voters simply know that it is harder to buy a first house, to put a child through college, or to pay for medical care than it used to be. The technical argument boils down to indices. The EPI study follows the practice of the

'Minorities are much the worst affected, as has always been the case; but the biggest increases in recent years have been in white poverty, rural poverty and child poverty. Only the old have improved their position'

Department of Labor in deflating wages by the retail price index. Unfair, say the Reaganites; they (and the JEC) prefer the implicit consumption deflator from the GNP estimates, which gives proper weight to the changing pattern of spending.

The point is quite interesting academically, but is unlikely to persuade a single voter to open a bottle and celebrate the fact that his wages have risen in real terms, after all. I suspect myself that it is a matter of whether you are concerned with the average American or the poor American. The implicit deflator is a more scientific way of guessing at total real consumption; but is gives a more favourable picture because spending has grown most rapidly on things whose real price has fallen sharply - electronics and air fares, for example. These are not what the poor buy.

The poverty statistics are really startling. Not only has the number of people below the official poverty line risen by some 8m in the last eight years of steady economic growth, but a greater proportion of them are far below it. The minorities are much the worst affected, as has always been the case; but the biggest increases in recent years have been in white poverty, rural poverty and child poverty. Only the old have improved their position.

But why has all this happened? The voters clearly tend to blame Reaganomics - especially women voters who manage household budgets and are paid less when they go out to work to help to cover those budgets. The much discussed gender gap - the Vice President's poor standing among women - is surely as much an economic as a personal judgement.

But the trends which have made the poor poorer generally date back to the mid-1970s or even the late 1960s, and so predate the new conservatism. The most important ones are social and structural. Households are much smaller; they need more dwellings, but have less to pay for them; hence Governor Dukakis's stress on affordable housing. Most of the child poverty is in single-parent families, again a rapidly growing group. This is not a trend the Republicans encourage.

Above all, as the JEC study shows, most of the growth has been in low-paying industries, and gap between average pay in the expanding and contracting industries have been much bigger than ever before - over $10,000 a year in the Reagan period, compared with $600-$800 in the previous two decades.

The exposed industries seem to have responded by cutting labour rather than cutting wages. Employment has grown only a little more than half as fast in the Reagan expansion as in previous expansions. Unemployment has fallen because the labour force was also growing more slowly (as in Britain in the last two years).

Mr Dukakis talks of good jobs at good wages - but how is it to be done? Mr Jackson stresses welfare. The voting pattern in Britain suggests that good wages buy voting support, but welfare payments don't. Or is it inequality which voters find offensive, when they are enjoying at best a sluggish growth of incomes? Or cuts in support for health, education and public transport services? The election may throw some light on all these matters, and help to educate governments in other rich countries.

UK GILTS

A black mood over policy

By Simon Holberton

THE SORRY state of sterling left the gilt-edged securities market reeling at the end of last week and not even the rally in the US bond market was enough to give more than modest encouragement to either domestic or international investors.

For the first time in more than eight months the market for long-dated gilts closed above 10 per cent. If it was not for the persistent and fairly aggressive purchases of gilts by the Bank of England long yields would almost certainly be much higher.

The market is in a black mood. Despite low turnover and activity in general, there were reports of investors liquidating significant lines of stock and placing their funds on deposit, courtesy of the Bank acting as "buyer of last resort".

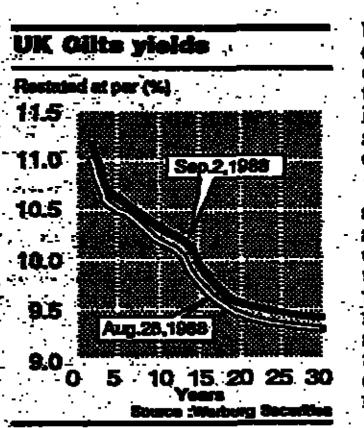
It seems unlikely that the gilt market can move ahead until there are signs that the recent rises in interest rates are having an effect on demand in the economy; although on technical grounds it seems over-sold and it could bounce back temporarily.

The predictions from the analytical community last week concerning M0 growth in August (it looks like having grown at an annual rate of around 7.7 per cent) and the implications for retail sales that flowed from that were not encouraging.

Although the relationship between M0, mainly notes and coins in circulation, and retail sales is not precise, the two tend to move sympathetically. Given that consumer expenditure is one of the factors fuelling the current account deficit this does not appear to bode well for the August trade figures either.

The next stage along the littoral of this less than virtuous circle is further downward pressure on sterling and further upward pressure on interest rates followed by a further deterioration in the current account.

UK Gilts yields



The problem for the market, and the authorities as well, is when will enough be enough. The gilts market is split on this between the many saying that the recent tightening has laid down the conditions for a "soft landing" for the economy and those who believe it has not.

The current uncertainty in the gilts market is just the outward manifestation of this inward unease over the short-run effectiveness of policy.

By its actions in the foreign exchange markets the Bank has shown that it is not indifferent to the value of sterling. The Treasury made much of the absolute size ($50.6bn) of the UK's foreign reserves when the figures for August were released on Friday.

The foreign exchange markets have not yet experienced a full-scale Bank defence of the pound. Intervention usually moves through three distinct but not precise stages: *rhetoric* (asking the foreign exchange brokers for quotes); *nibbling* (buying through brokers and clearing banks); and, *hitting* the market when it is hopelessly short (that is, buying sterling through just about everyone and in size).

Currently we seem to be somewhere between the first and second stages of the process. There is some way to go, therefore, before the authorities consider a purely defensive rise in interest rates to support sterling. The increase in rates to 12 per cent encompassed the defence of sterling but the primary motive was domestic.

Given the authorities' concern over sterling, however, it does seem hard to reconcile the Bank intervening in the foreign currency market to support sterling at the same time it buys in gilts. The latter operation has the effect of supporting prices and depressing yields from the level at which they otherwise would be.

A higher level of yields at the long end may conceivably act as an attraction to foreign investors. On a comparative yield basis, gilts have gained substantially in attraction compared with US Treasuries, West German Bunds and Japanese Government bonds.

Against that, higher capital losses which would probably occur without the Bank in the market may make the risks of an acceleration in capital flight greater.

The Bank would agree that its operations in the market over the past week have attenuated the speed of the deterioration in gilt prices and yields. However, it takes that view that its operations are consistent with the trend of the market. There is no suggestion that it is attempting to change the market's view of long-term rates.

THIS WEEK

THE OUTLOOK for US inflation could be the focus of attention in financial markets this week, possibly influencing currency movements and speculation about world interest rate moves.

Figures for the August producer prices index are released on Friday. The index covers factory gate prices and could give an early indication of a possible upswing in general price inflation. The MMS International consensus of analysts forecasts is for a 0.5 per cent rise - the same as in July.

In the UK, the Confederation of British Industry/Financial Times distributive trades survey is published on Thursday. It will cover reported sales by retailers in August and expectations for September.

Analysts will be looking for signs that the 4½ percentage point rise in base rates since May has moderated consumer spending. If fast growth shows no signs of slowing it could add to fears of a fall in the pound and still higher interest rates.

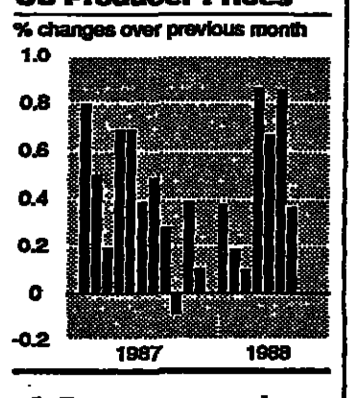
The final index of retail sales in July released today is also likely to attract more attention than usual. Provisional figures showed a big rise of 2 per cent.

In West Germany, Bundesbank watchers will have a further chance to assess the central bank's thinking on monetary and economic matters when Mr Karl Otto Poehl, president, holds a press conference in the northern town of Celle on Thursday.

The Bundesbank has recently raised its discount rate to try to prop up the weaker D-Mark, stem heavy capital outflows and rein in money supply growth. The interest rate on the regular securities repurchase deals (repos) have also been increased for the same reasons. Another repo is due this week, but no further rise in rates is expected.

US Producer Prices

% changes over previous month



In France, money supply figures for July are expected to be published this week. The single targeted monetary aggregate, M2, has been growing at a rate well within the forecast band of 4 to 6 per cent, despite stronger than expected real growth and inflation so far this year.

The French financial authorities have referred to this controlled monetary growth to justify their belief that France does not present the same conditions for interest rate rises as West Germany or the UK.

Other statistics and events due this week (with MMS International consensus in brackets) include:

Today US Markets closed for Labor Day. UK credit business in July.

Tomorrow US auto sales in August. Results of US purchasing managers survey covering orders and output levels and price expectations in August.

Wednesday UK Department of Employment publishes Employment Gazette.

Thursday US consumer credit for July ($4.2bn increase).

Friday UK construction statistics (three months to June) UK Central Statistical Office publishes National Accounts, 1988 Edition (The "Blue Book").

INTERNATIONAL CAPITAL MARKETS

EUROCREDITS

Deals begin to flow thick and fast

NEW DEALS started to flow thick and fast into the international loans market last week after summer's slowdown, with the further promise that this week should see a significant further build-up in activity.

Malaysia awarded a mandate for a 10-year financing to a group of five banks, led by J.P. Morgan Asia. Bidding was fiercely competitive resulting in terms the like of which the country has not seen before.

It pays interest of 12½ basis points for the first two years and 25 basis points for the remainder. Two years ago, in its previous large US dollar bank financing, Malaysia raised $405m at a margin of 37½ basis points for six years and 50 basis points for the remainder.

The other banks underwriting the transaction are Industrial Bank of Japan, Long Term Credit Bank of Japan, Société Générale and Bank Bumiputra Malaysia.

British Airways mandated National Westminster Bank to raise £250m in a multi-option facility. The five-year financing carries a margin of 10 basis points over London interbank offered rates, a facility fee of 6¼ basis points and a utilisation fee of 2½ basis points if more than half drawn. There is expected to be no shortage of takers even at such benchmark terms.

Still in the UK, S.G. Warburg launched a £70m management buyout financing for Flairdial, the purchasing company for the clothing division of Coloroll obtained in the purchase of the Crowther Group. The financing is split between a £50m term loan and a £20m revolving credit with an overall seven-year maturity. The interest margin starts at 2 percentage points falling to a minimum of one point, depending on interest cover. There is a commitment commission of ¼ per cent for the financing, implicitly underwritten by Warburg, Continental Illinois, Sumitomo Bank and Midland.

Midland Montagu has arranged a £64m financing for Carroll Group, a privately-owned property developer, to finance a £100m shopping complex in Hatfield, north of London. Some £12m of this is non-equity mezzanine debt finance provided by Prudential Assurance, and the rest is an unusual combination of a seven-year fixed rate loan and a flexible drawdown schedule. This is accomplished by using a combination of interest rate swaps and options.

After last week's three-year financing for Enron, the Houston-based gas and oil concern, through Crédit Suisse First Boston, bankers expect further US borrowers in the loans market this week. The Enron deal is split into three parts: a $250m term loan with a margin of 42½ basis points, a $250m revolving credit with a margin of 50 basis points on the first half and 60 basis points on the second, and a $250m competitive bid facility.

In the commercial paper markets, **Burmah Oil** has arranged for itself a £200m sterling and Eurodollar commercial paper programme, and has appointed Citicorp, County NatWest, Midland Montagu and Swiss Bank Corporation Investment Banking. The company, which has obtained an A1/P1 rating for the programme, is also contemplating a US programme and has established £225m in medium-term standby loans with banks on a bilateral basis.

SNCF, the French rail monopoly, *has established* a Y18bn Euroyen commercial paper programme arranged by Yamaichi International.

Stephen Fidler

EUROMARKET TURNOVER ($m)

Primary Market

	Straights	Conv	FRN	Other
US$	1,576.5	0.0	240.8	8,066.9
Prev	2,660.2	0.0	200.0	9,686.6
Other	2,866.7	1.3	573.7	939.9
Prev	1,474.3	139.0	410.2	2,542.3

Secondary Market

US$	11,761.7	1,040.0	5,804.6	5,427.9
Prev	13,600.6	1,059.5	5,075.6	6,032.1
Other	14,657.3	1,227.3	6,553.5	18,599.4
Prev	14,382.2	970.3	5,314.8	20,497.4

	Cedel	Euroclear	Total
US$	9,818.7	24,099.7	33,918.4
Prev	10,337.9	27,976.7	38,314.6
Other	22,311.2	23,107.9	45,419.1
Prev	20,949.7	24,780.8	45,730.5

Week to September 1, 1988 Source: AIBD

INTERNATIONAL BONDS

Plain vanilla Euroyen issues lose flavour of the year

WHATEVER HAPPENED to the Euroyen market? After outstripping dollar bonds as the securities of choice in the Eurobond market early last year, plain vanilla Euroyen issues have now virtually dropped from sight.

Straight Euroyen issues so far in 1988 have totalled a modest Y861bn compared with Y2,636bn in the whole of last year and Y2,557bn in 1986, according to data from Euromoney Bondware.

The sense that the yen has peaked against other leading currencies and the low interest rates on Japanese bonds share a large part of the blame for turning the flood of new issues into a trickle this year. The events of the past summer have done even less to whet the appetite of investors for the Euroyen securities.

Mr Jim O'Neill, international fixed interest economist at Swiss Bank Corp Investment, calculates that Japanese government bonds (JGBs) have lost 17 per cent of their value in the past two months. In the two weeks to last Friday, yields on 10-year JGBs rose to 5.85 per cent from 5.51 per cent, a dramatic rise for so short a period.

And by many accounts, the worst is not yet over.

Euromarket attention last week was riveted on the yen as the currency skidded against the dollar. For their part, Japanese officials professed no intention of raising the 2½ per cent discount rate to brake its fall.

Domestic economic conditions and inflation simply do not warrant higher interest rates, according to Mr Kiichi Miyazawa and Mr Satoshi Sumita, Japan's Finance Minister and central bank governor.

But if Japan's chief monetary officials feel higher rates are uncalled for, the markets see the matter differently. Pressure for an increase in the discount rate is mounting, with Japan the only one of the Group of Seven countries not to have raised official rates in the past few weeks.

Mr David Osman, international economist at James Capel, says Japanese officials, mindful of US criticism that they are not doing enough to stimulate domestic demand, are wary of any move as visible as a discount rate boost. When they do raise the rate – as Mr Osman and other economists believe they will – Japanese monetary authorities can righteously point to other market interest rates and say they are simply following the trend.

But Mr Osman believes that longer term, the yen will resume its rise, reaching Y110 to Y115 to the dollar by the end of 1989.

Surely, such an outlook for the currency and possible higher yields on bonds should be enough to pique the interest of investors who have ignored Euroyen bonds all year.

While underwriters say the yen's vulnerability is the main reason why Euromarket investors have largely lost interest, there are other, more complex, reasons.

Mr Jan Eistein, new issues chief at ANZ Merchant Bank, said: "Apart from Japanese firms, nobody wants to borrow yen for its own sake." In order for non-Japanese companies to want to borrow in yen, it must be possible to swap the funds into a more desirable currency at an advantageous interest rate.

The Republic of Ireland's Euroyen bond earlier this year was one of the few that was not swapped into another currency, with the Irish presumably having discovered a trade-related need for the currency that could not be met any other way.

Mr Takumi Shibata, a director at Nomura Securities, said: "The main reason for the absence of Euroyen issues is the absence of swap opportunities. As of now, its cheaper to borrow in dollars and swap into yen than to borrow in yen."

Interest rates on yen issues have simply been too low this year to enable borrowers to raise yen and then swap into the most desired currencies. At a minimum, the interest rate on a 10-year Euroyen bond would last week have had to be 5.90 per cent in order to effect a swap into dollars. Even after the sharp rises in interest rates last week, 10-year Euroyen bonds were still only yielding about 5.75 per cent.

Also, some of the yen borrowing that may once have been done in Europe is trickling back to Japan where the investors do not fear currency fluctuations.

Japanese banks and securities firms have been able to capture pockets of domestic Japanese demand with clever product design.

An increasingly significant portion of the Euroyen market has been in the form of various "bull and bear" two-tranche deals with redemption prices linked to the performance of the Nikkei stock index or to JGB futures prices.

Officials at the underwriting houses privately concede the "Eurobond" designation for many of these issues is something of a fiction – virtually all the securities wind up in the portfolios of Japanese insurance and pension funds.

Deregulation of Japan's domestic markets, slow and incremental though it is, is also succeeding in bringing some borrowing back to Tokyo. Nomura's Mr Shibata cites the example of several top Japanese electric companies, classic Eurobond borrowers, which this year have returned to their own market.

Japan's Ministry of Finance has for the first time allowed these companies to assign mandates on the basis of competitive bidding, with the happy result that the securities houses are undercutting each other out of a desire to reap new business.

Mr Shibata estimates that borrowers are able to borrow at rates 15 to 20 basis points below comparable rates in Europe as a result of the competitive bidding system.

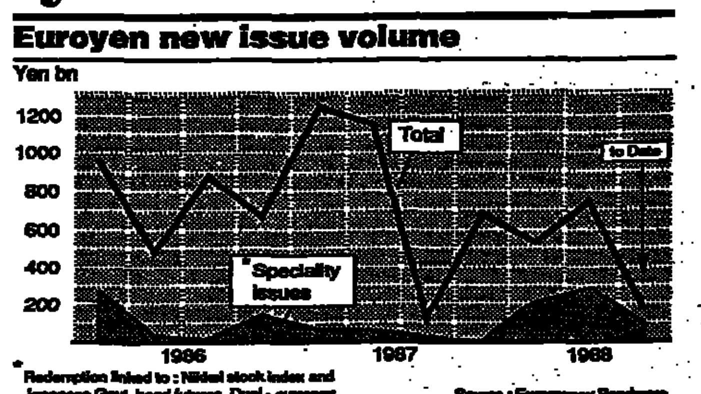
Apart from these problems in the primary market, difficulties have also surfaced in the secondary market.

Anecdotal evidence suggests that secondary trading has become highly illiquid in some issues.

Late last week, the fall in the yen threw the equity markets into disarray with the predictable result of sparking yet another bloodletting in the equity warrant sector. Daiwa Securities was apparently forced to postpone two issues last week, one for Casio Computer and the other for Marudai Food as a result of chaotic market conditions.

On Friday, Nomura Securities took the unusual step of fixing the coupon on its issue for Yasua Shoji ¼ point above the indicated level, raising it to 5⅛ per cent. The move cut the losses on the issue only modestly, with the discount slipping to only 4½ points below its par issue price from a full five points before the fixing.

Euromarkets Staff



* Redemption linked to: Nikkei stock index and Japanese Govt. bond futures. Dual - currency
Source: Euromoney Bondware

NEW INTERNATIONAL BOND ISSUES

Borrowers	Amount m.	Maturity	Av. life years	Coupon %	Price	Book runner	Offer yield %
US DOLLARS							
Hankyu Corp.‡◆	200	1992	4	4¾	100	Daiwa Europe	4.750
Nissho Corp.‡◆	120	1992	4	5	100	Nomura Int.	5.000
Itoman & Co.‡◆	230	1992	4	4⅞	100	Nomura Int.	4.875
Howa Machinery‡	50	1992	4	(5¼)	100	Nomura Int.	★
Yuasa Shoji Co.‡◆	50	1992	4	5½	100	Nomura Int.	5.500
Nippon Credit Bank◆	150	1993	5	9¾	101⅝	Nippon Credit Int.	9.329
Japan Development Bank◆	200	1993	5	9⅝	101⅝	Bk of Tokyo Cap.Mkts	9.205
Dai-Ichi K. (A'tralia)◆	150	1992	4	9⅝	101⅜	Shearson L'man Hutton	9.199
Finnish Export Credit◆	150	1991	3	9½	101⅜	Mitsubishi Fin.Int.	8.957
Tokyo Electric Power◆	250	1993	5	9¾	101⅞	County NatWest	9.265
Xerox Credit Corp.◆	200	1990	2	9⅜	101.10	Goldman Sachs Int.	8.752
AUSTRALIAN DOLLARS							
Amro Australia◆	60	1991	3	13⅝	101½	Amro Bank	12.990
D-MARKS							
Senko Co.‡◆	130	1993	5	1½	100	Bayerische Vereinsbk	1.500
CB Finance◆	300	1993	5	6	100½	Commerzbank	5.882
Deutsche Bank Finance◆	600	1994	5⅓	6	100⅝	Deutsche Bank	5.851
Electric Power Dev.Co.◆	120	1995	7	6	101¼	WestLB	5.778
Nat.Bk of Hungary (c)◆	200	1995	6½	6¼	97	DG Bank	6.827
SWISS FRANCS							
Thesing Int.Fin.(b)	25	1993	-	(3½)	100	TDB Amex Bank	★
Nichiban Co.★★§◆	40	1993	-	½	100	Credit Suisse	0.500
Showa Tansan Kaisha★★§◆	25	1993	-	½	100	SBC	0.500
Tobishima Corp.★★§◆	300	1993	-	¼	100	Citicorp Inv. Bank	0.250
Toyo Communication★★§◆	70	1993	-	½	100	B.della Sviz.Italiana	0.500
Energy Support Corp.★★§◆	35	1993	-	½	100	Bank Julius Baer	0.500
Kanebo Ltd.★★‡◆	200	1993	-	1⅝	100	SBC	1.625
Takasago Thermal Eng.★★§	60	1993	-	(½)	100	Nikko (Switz) Fin.	★
Toyama Chemical Co.★★‡	100	1993	-	(1¾)	100	Credit Suisse	★
Japan Air System★★§	100	1993	-	(½)	100	Swiss Volksbank	★
Apollo Electronics★★§	50	1993	-	(½)	100	UBS	★
Ireland★★◆	100	1994	-	4¾	100	Bqe Paribas (Suisse)	4.750
Shin-Etsu Polymer★★§	50	1993	-	(½)	100	UBS	★
STERLING							
TMC Mortgage Sec.10(d)‡◆	200	2019	7.2	30bp	100	Salomon Brothers	
LIRE							
World Bank◆	150bn	1993	5	11	101½	Banca Comm.Italiana	10.598
LUXEMBOURG FRANCS							
Credit Lyonnais★★◆	300	1993	5	7⅝	100¼	Credit Lyonnais	7.583
Sorlandsbanken★★◆	300	1993	5	8	100½	Bqe Paribas (Lux)	7.875
YEN							
St.Bk New Sth Wales(a)◆	6bn	1993	5	7	101⅞	Daiwa Europe	6.548

★Not yet priced. ★★Private placement. ‡Floating rate note. ‡With equity warrants. §Convertible. ◆Final terms. a) Bull/bear issue Y3bn each tranche. Redemption linked to Japanese Government Bond futures. b) With warrants if company goes public. c) Fungible with DM200m issue launched in March 1988. d) 30bp over 3m Libor first 10 years, 50bp over 3m Libor thereafter. Note: Yields are calculated on AIBD basis.

Decision expected on American Savings

By Anatole Kaletsky in New York

THE FUTURE of American Savings and Loan, the huge bankrupt thrift institution which is the main operating subsidiary of Financial Corporation of America, remained in the balance over the weekend, three days after the expiry of a negotiating deadline set by the Federal Home Loan Bank Board.

The FHLBB said no announcement would be made until today after extending for a further three days the exclusive negotiating rights which it had granted Mr Robert Bass, the wealthy Fort Worth investor.

Mr Bass had originally been told that he would have to reach an agreement by midnight last Thursday over the purchase of the $30bn California institution, which has been a ward of the FHLBB for more than three years.

The repeated extensions of the deadline suggested to some analysts that the FHLBB was putting pressure on the Bass group to improve its offer. There was also speculation that another bidder, the First Nationwide Bank subsidiary of the Ford Motor Company, might seize on the delays to re-enter the contest for AS&L.

Mr Bass is believed to have offered to inject about $550m of his own money into AS&L, which is the country's second largest thrift institution with total assets of about $30bn and insured deposits of $15bn. The FHLBB would have to provide between $2bn and $3bn of assistance through its subsidiary, the government-guaranteed Federal Savings and Loan Insurance Corporation.

The FSLIC had previously said that it would guarantee all deposits in AS&L, including the uninsured deposits of over $100,000. In exchange for its assistance, the FSLIC would receive a warrant convertible into a 30 per cent stake in the refinanced institution.

While this deal was thought to have been broadly acceptable to the FHLBB, some analysts believe that Mr Danny Wall, the agency's increasingly beleaguered chairman, asked for a big improvement of the Bass group's terms at the last moment.

Mr Wall has been under growing pressure from Congress over the enormous losses of the savings and loan industry which his agency was supposed to have supervised, and the overoptimism of the FHLBB's projections about the costs of on S&L rescues.

Mr Wall has also been criticised for giving the Bass group its exclusive negotiating rights after the failure of an earlier round of talks with several financial institutions, including First Nationwide and Citicorp.

First Nationwide has been lobbying to be given the right to resubmit an offer. Unless Mr Wall can demonstrate that he has negotiated an attractive deal with Mr Bass, he is likely to face further sharp criticism when he appears before Congress later this week.

WPP offshoot loses IBM's US account

By Roderick Oram in New York

A NEW YORK advertising agency owned by WPP Group of the UK last week lost the US account of International Business Machines, constituting roughly half of its business.

The departure of such a large and prestigious client represents a further severe setback for the advertising agency, Lord Geller Federico and Einstein, which is trying to recover from a damaging series of defections by senior staff earlier this year.

Renowned for its creativity, Lord Geller had held the IBM account for nine years and devised the company's first corporate image campaign.

Lord Geller said it was too early to say whether it would cut its staff - already down by about 60 to 270 following the defections and the loss of three other accounts. It said it had been highly confident of retaining the IBM business and was "shocked" by losing it.

However, the IBM billings of about $125m a year represented only a fraction of WPP's total US operations.

WPP acquired Lord Geller last year when it bought the US company's parent, JWT. The vast bulk of the business WPP acquired in the deal was represented by the J. Walter Thompson agency, another JWT subsidiary, with billings of $3.3bn.

IBM decided to review its account with Lord Geller after the departure from the agency of Mr Richard Lord and other senior staff. They left to form Lord Einstein O'Neill and Partners with the backing of Young and Rubicam, a JWT rival. The defectors said they had left Lord Geller because of the tight management style of Mr Martin Sorrell, the WPP chairman.

As a result of its review, IBM asked six agencies to bid for the account, including Lord Geller and its new rival Lord Einstein.

San Diego Gas rejects SCEcorp

By Our New York Staff

SAN DIEGO Gas & Electric has rejected a $2.4bn merger offer from SCEcorp, the Los Angeles-based parent company of Southern California Edison.

San Diego's board voted unanimously last week to oppose the merger, claiming that it would result in higher long-term rates to its customers despite some "potential short-term benefits to shareholders."

San Diego's rebuff looks like confronting SCEcorp with the choice of raising its bid or abandoning its hopes of creating the largest privately-owned utility in the US. A hostile takeover would face big regulatory and financial obstacles and SCEcorp indicated when it first proposed the merger in July that it would be unlikely to proceed without the support of San Diego's board.

Losses rise sharply at Hudson's Bay

By Our Toronto Correspondent

HUDSON'S BAY, the venerable Canadian merchandising and property group, incurred sharply increased net second quarter losses, due primarily to a C$27m (US$22m) special charge related to the recent default of Red Carpet Distribution, a Toronto-based wholesaling company.

Hudson's Bay sold its wholesale division to Red Carpet for C$133m in July 1987. The C$27m charge represents the unpaid balance on that sale.

The results mark a prolongation of the hard times which Canada's oldest enterprise has been going through of late. The company has been profitable only once in the last five years.

In all, net losses for the latest period totalled C$33m or C$1.31 a share, compared with a loss of C$22.5m or C$1 a share in the 1987 second quarter. The 1987 figure includes special charges relating to disposals of C$4.6m. Revenues declined marginally to C$1.06bn, versus C$1.08 bn a year ago.

Results were more encouraging at an operating level, with losses falling to C$6bn in the latest quarter, compared with C$17.9 bn in 1987.

In the six months to July, net losses totalled C$56.4m or C$2.31 a share on revenues of C$3.03 bn, against a year-earlier loss of C$67m or C$2.74 a share on revenues of C$2.26 bn. The 1987 figure includes special charges of C$24.6m.

Six months' operating profit from ongoing merchandise operations was C$11m, against C$9.3m in the corresponding year-earlier period. The company expects all retail divisions to achieve profit improvements over last year.

Property-related operating profits rose sharply to C$35m, due to increased earning from Ontario land sales.

Parmalat rejects overtures from Kraft

By John Wyles in Rome

MR CALISTO TANZI and the lesser shareholders in his Parmalat Italian food empire have rejected acquisition overtures from Kraft of the US after a furtive weekend meeting.

Having led observers to believe that the Parmalat shareholders' meeting would take place today, Mr Tanzi succeeded again in avoiding media interrogation by holding it on Saturday.

Since it became known in mid-June that he was negotiating a possible L700bn ($505.4m) sale of his business to Kraft, Mr Tanzi has consistently refused to confirm the discussions. Kraft was not named in the weekend statement which acknowledged only that "attractive values" had been put on Parmalat companies by "foreign multinationals."

These had not been accepted because the shareholders gave a higher priority to their belief that "the company still has valid projects to carry out at home and abroad."

The principal Parmalat shareholders are Mr Tanzi with 35.8 per cent, his brother Giovanni with 25 per cent and his sister Anna Maria with 10.5 per cent.

While apparently rejecting Kraft's approaches, Parmalat also agreed on a restructuring operation which may be seen as possibly simplifying the entrance into the group of new investors. Five subsidiary companies are to be incorporated into the Parmalat parent "in this way simplifying their role" as autonomous production centres, the statement said obscurely.

In a further move which will increase suspicions about the future of the Parmalat food business, the shareholders also decided to strip out of Parmalat Mr Tanzi's 50 per cent of the Odeon television channel – still a lossmaker but the repository of great hopes in the Tanzi family.

After this reorganisation, Mr Tanzi is in a better position to pursue his negotiations with Federconsorzi, the national federation of Italian farmers' co-operatives, on selling an equity stake in Parmalat.

Osaka scores a rare victory over Tokyo

By Stefan Wagstyl in Tokyo

OSAKA, Japan's second city which is usually overshadowed by Tokyo as a financial centre, scored a rare victory over the Japanese capital on Saturday when the rival stock exchanges simultaneously launched stock index futures.

To the surprise of many securities brokers, the Osaka exchange grabbed the lion's share of the trading volume – Y3,300bn ($24.2bn) against Y1,700bn in Tokyo.

Osaka exchange officials claimed the coup was probably due to their promotional campaign, while brokers said Tokyo Stock Exchange officials were shocked by the setback.

The reason for Osaka's success seems to be the fact that its contract is based on the Nikkei average of 225 leading Japanese equities. Apart from being the best-known indicator of the Japanese market, the Nikkei is more volatile than the market as a whole and is especially attractive to speculators.

By contrast, the Tokyo exchange's Topix index is based on the prices of about 1,000 stocks listed on the exchange's first section. While Topix is a more accurate indicator of movement in the whole market, it is less well known than the Nikkei index and moves more sluggishly. Its main attraction is as a means of hedging (protecting) a widely spread portfolio of shares.

Brokers warned against reading too much into the first day's trading since much of the business was congratulatory – a custom where institutions place orders to mark a debut. Mr Hiroaki Hanao, deputy general manager of stock trading at Daiwa Securities, said volumes this week could be 50 per cent lower. Turnover could pick up later as investors became familiar with the contracts.

Both Tokyo and Osaka tried to turn the opening of the markets into festive occasions, with officials cutting ribbons in front of the computers which operate the two systems. Senior executives of member companies wore rosettes and television cameras were out in force.

The celebrations paled in comparison with the colourful troops of girls in kimonos who greet the start of trading every New Year. But there was no doubting the importance of the event for the financial markets. Exchange officials in both Osaka and Tokyo expect that stock futures trading in Japan will eventually exceed volume in the equity market – as it has done in the US.

Tapie poised for strong grip on Donnay rackets

By William Dawkins in Brussels

MR BERNARD TAPIE, the French entrepreneur, was poised at the weekend to take control of Donnay, the bankrupt Belgian producer of tennis rackets.

The family-owned company, based in the southern Belgian town of Couvin, called in the receivers last week with debts said to reach BFr41.4bn ($35.8m), but has continued to work at reduced output under the protection of the regional authorities.

It is best known as former supplier to Bjorn Borg, the Swedish tennis champion.

Under the offer, the company would receive a BFr300m capital injection from Mr Tapie jointly with Mr Albert Frère, the Belgian financier, Prominvest, a local investment group, and the regional executive of Wallonia.

That would leave the French businessman with a 51 per cent stake, Mr Frère with 20 per cent and the regional authorities with 29 per cent.

The deal would reduce the 350-strong workforce to 120. Mr Bernard Anselme, the regional economics minister, insisted on Mr Frère's participation as a condition of the deal, which has yet to gain formal approval of the receivers.

The offer would "allow Donnay to relaunch its activities in a durable way and without doubt achieve new growth,"

A final decision is expected tomorrow, the receivers' deadline for other takeover offers.

NatWest shuts Bahrain unit

NATIONAL WESTMINSTER Bank of the UK is closing its offshore banking unit (OBU) in Bahrain this month, Reuter reports from Bahrain.

The bank said it would maintain a representative office. The move followed the scaling down of the OBU in 1986, when it closed its dealing room.

Sime Darby year-end pre-tax profits advance 70%

SIME DARBY, the Malaysian industrial and plantations conglomerate, achieved pre-tax profits of 308.3m ringgit (US$115.4m) for the year to June, up 70 per cent, Reuter reports from Kuala Lumpur.

Net earnings of 134.5m ringgit were 59 per cent higher, on turnover up by a third to 3.37bn ringgit.

Consolidated Plantations, the commodities division, doubled pre-tax earnings to 93.9m from 46.7m ringgit on a further increase in palm oil and rubber prices.

Dunlop Malaysian Industries, the manufacturing arm, showed profits of 22.7m against 16.1m ringgit as the volume of tyre sales grew and productivity improved.

Tractors Malaysia doubled its profits to 36.6m ringgit from 18.6m ringgit because of good timber prices and higher sales of machines to the logging industry.

Despite the weak property market, United Estate Projects contributed 34.6m ringgit, up from 30.3m ringgit.

However, Sime's insurance division posted losses of 1.5m ringgit against profits of 7.3m ringgit.

Turkey looks to borrow from Japan

By Jim Bodgener in Ankara

TURKEY PLANS to borrow the equivalent of $700m from Japan this month in a move that looks to solve neatly the problem of its debt servicing needs for the rest of 1988.

International bankers have long harboured doubts about Turkey's ability to finance its borrowings. Inflation is rampant, the balance of payments is weak and Turkey's foreign borrowings are high in relation to the size of the economy.

In this context, and in tandem with $400m provided by the World Bank earlier this year, the Japanese funds allow Turkey's central bankers welcome breathing space.

Credit valued at a total $400m from the Export-Import Bank of Japan (Eximbank) is expected to be signed today. Its terms will be 17 years' maturity with 5¼ years' grace, and an interest rate of 5.3 per cent.

Another $300m in commercial funds will be syndicated among Japanese banks in Tokyo during September, say Turkish officials. Neither of the two tranches will be tied to Turkish purchases of Japanese goods and services.

Turkey needed to find about $3bn in fresh borrowing in 1988 to meet debt-servicing requirements, say officials. Of this, some $1.9bn was sourced in the first half of the year. In addition to the Japanese funds, the central bank is also issuing around $300m in commercial paper in Europe.

Officials say there has been no increase in Turkey's borrowings which stood at $38.3bn at the end of 1987. If the appreciation of the US dollar in the first six months of the year is taken into account, effectively there has been an $800m reduction, they claim.

Treasury officials say that the target of a 23 per cent increase in exports by the end of the year to $12.3bn will probably be met, based upon figures for the first six months. These showed a 30 per cent increase in exports compared with a 23 per cent increase in imports.

In the first five months of the year, the current account deficit worked out marginally higher than January-May 1987 at $530m. However, errors and omissions were in surplus by $350m this year compared with a deficit of $150m over the same period in 1987.

Turkey's bumper harvest this year is expected to boost exports. At a time of drought in the US, for example, Turkish wheat production is projected to total 21.5m tonnes, leading to an exportable surplus valued at about $300m to $400m on world markets.

Despite these encouraging statistics, organisations like the International Monetary Fund are unhappy about the Government's handling of the domestic economy where inflation has soared to more than 60 per cent.

A recent IMF report stringently criticises the Government for failing to bring down inflation and for its lack of control of extra-budgetary special development funds, and the financial demands on the exchequer of state economic enterprises.

On an economic base which in terms of gross national product amounts to little more than $60bn, Turkey is running a foreign loan book that extends to no less than $38.5bn. Inflation is slowing but by all accounts is still running at more than 60 per cent a year.

NAB to raise A$700m

By Our Financial Staff

NATIONAL Australia Bank (NAB), one of Australia's Big Three private sector banking groups, plans to raise up to A$700m (US$555.3m) from bond issues in the domestic market and in the US.

Mr Nobby Clark, managing director, said in a local television interview yesterday that one issue would be a long-term Yankee bond in the New York market. "Domestically, we have a new instrument that we think is going to be quite exciting for institutions," he said.

Mr Clark said the bank was seeking partly to fill the vacuum left from the Government's exit from the medium-term debt market. ANZ and Westpac, the other two leading banks, had announced plans to raise about A$500m each from bond issues.

The NAB programme is due to start this month.

US MONEY AND CREDITS

The triumph of the Federal Reserve Board

WHO EVER said that being a central banker was a difficult and thankless job? A month ago Mr Alan Greenspan and his colleagues at the Federal Reserve Board decided to do something which was supposedly all but impossible – to rein in the rampant US economy without destabilising the currency and equity markets or, even more importantly, causing too much political embarrassment to their friends in the Republican re-election campaign.

They raised the discount rate, mumbled some incantations about capacity constraints and inflationary pressures and hoped for the best.

Last Friday, only four weeks later, the bond market was able to rejoice in the triumphant results.

Sure enough, the US economy was slowing. The August unemployment rate was up by 0.2 percentage points to 5.6 per cent. Payroll employment increased by only 219,000 in August compared with analysts' estimates of 230,000 and market fears of 250,000 or more.

Even better, the July payroll figure was slashed from 283,000 to 200,000. This meant an average employment growth of 215,000 so far in the third quarter, one third below the monthly gain of 337,000 in the first six months of the year.

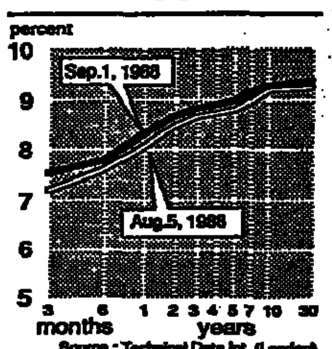
The week's lesser economic indicators, as well as the details of the employment figures confirmed the same message of marked deceleration since the late spring and early summer. Manufacturing employment actually fell slightly in August, the first such decline since January. Overtime working and average hours were also down.

Meanwhile, new home sales in July were 4.7 per cent lower than in June, while manufacturing orders fell by 3.5 per cent. The July leading indicators declined by 0.8 per cent after their freakish jump of 1.4 per cent the month before. Given the equally erratic 0.7 per cent decline of this index in May, the general picture presented by the leading indicators was of an economic outlook as flat as the cornfields of Kansas.

It was hardly surprising, then, that on Friday the bond market enjoyed its biggest one-day rally for six months. To the Fed and the bond markets a flat horizon is as beautiful as it is to a fifth-generation wheat farmer.

If the economy could go on creating jobs at a steady 200,000 to 250,000 a month, with earnings flat and some of the pressure coming off the overheated industrial sectors, there would be no need for further monetary tightening. And even if this performance cannot be sustained much longer, Mr Greenspan needs only two more months of moderate economic figures to retire gracefully from the scene until after the November election.

US Treasury yields



Source: Technical Data Int. (London)

But if the Fed chairman seems to have accomplished his supposedly herculean labours with little effort this summer, his counterparts in Tokyo and Frankfurt have had an even easier time. There has been much sound and fury about the awesome dilemmas faced by West Germany and Japan in coping with the suddenly resurgent dollar. In fact, however, the central bankers could not have asked for a more pleasant or straightforward task.

The central bankers have had such an easy time this summer for one very simple reason. All of their actions have been designed to move the world economy towards a fundamental equilibrium at a time when markets were perversely trying to push in the opposite direction. The central banker's job only becomes really difficult when he is trying to counteract a powerful trend in the real economy or reverse deep-seated financial expectations.

Checking the dollar's rise at a time when the US trade deficit appears to have plateaued at an annual rate of more than $130bn annually is child's play compared with last winter's task of braking the decline in the currency.

It would be very rash, therefore, to conclude from the painless phoney war conducted by the central banks this summer that an equally bloodless resolution of the fundamental imbalances in the world economy will follow before too long.

The real war which has to be fought between the central banks and the financial markets at the end of every economic cycle has hardly yet begun. Sooner or later, this conflict will be joined, and it will have to be fought on at least three fronts.

The central banks, particularly the Fed, will have to defeat inflationary expectations. The hard part of a central bank's job as an economy approaches its cyclical peak is not to prevent real output and employment from booming. It is to make full employment sustainable without allowing inflation to get out of hand.

Over the coming months, attention in the US is likely to shift from the employment figures to the inflation numbers.

Unless these start coming down, the Fed will have to slow the economy below the growth of potential output – to put it bluntly, it will have to engineer a significant rise in unemployment and a recession.

Since the Second World War, no other policy has ever been successful in curbing inflationary expectations once they took hold.

Once a recession does get under way, the second front will open for the Fed. Monetary policy has always proved less effective in fighting recession than inflation – and in the next recession there will be little hope of assistance from an expansionary move in fiscal policy since the US budget deficit will rise to an horrendous level, even without policy changes, as soon as a recession begins.

All this might not be too daunting were it not for a separate battle which will have to fought on a third front. With the US trade problem still far from resolution, US and international monetary policy will be continuously constrained by the currency markets.

Anatole Kaletsky

US MONEY MARKET RATES (%)

	Last Friday	1 week ago	4 wks ago	12-month High	12-month Low
Fed Funds (weekly average)	8.15	8.02	7.78	8.19	6.27
Three-month Treasury bills	7.42	7.33	6.92	7.53	5.14
Six-month Treasury bills	7.76	7.49	7.25	8.04	5.74
Three-month prime CDs	8.37	8.50	8.18	8.51	6.77
30-day Commercial Paper	8.14	8.20	7.85	8.20	6.57
90-day Commercial Paper	8.36	8.40	8.00	8.40	6.65

US BOND PRICES AND YIELDS (%)

	Last Friday	Change on wk	Yield	1 week ago	4 wk. ago
Seven-year Treasury	99⅞	+1¼	8.87	9.25	8.96
20-year Treasury	102⅞	+2⅝	9.02	9.43	9.21
30-year Treasury	100⅝	+3⅝	9.04	9.43	9.13
New 10-year "A" Financial	n/a	n/a	9.60	10.10	9.90
New "AA" Long utility	n/a	n/a	10.05	10.50	10.20
New "AA" Long industrial	n/a	n/a	10.00	10.37	10.15

Source: Salomon Bros (estimates).

Money supply: In the week ended August 21 M1 rose $3.3bn to $783.4bn.

NRI TOKYO BOND INDEX

December 1983 = 100	PERFORMANCE INDEX 1/9/88	Average yield (%)	Previous week	12 wks ago	26 wks ago
Overall	142.41	5.08	143.30	144.21	142.76
Government Bonds	142.04	4.90	143.31	144.78	143.50
Municipal Bonds	144.44	5.29	145.44	145.94	144.33
Govt.-guaranteed Bonds	146.09	5.25	146.96	147.43	145.70
Bank Debentures	137.18	4.98	137.40	138.18	136.89
Corporate Bonds	143.89	5.58	144.45	144.07	142.12
Yen-denom. Foreign Bonds	147.27	6.35	147.09	145.01	142.42
Government 10-year†	–	5.40	5.29	4.97	4.83

† Estimated par yield

Source: Nomura Research Institute

Reform of Swedish securities rules urged

By Sara Webb in Stockholm

SWEDEN'S Stock Exchange should ban listings of companies where one shareholder controls more than 50 per cent of the voting power, according to a bourse team of investigators appointed in the wake of the collapse last year of Fermenta, a former glamour stock.

However, the proposal immediately came under attack from within the financial community. Mr Bengt Ryden, the bourse chief executive, said on Friday this would discriminate against family businesses seeking new capital as well as hit many companies which already benefit from strong ownership.

The inquiry into the failure of Fermenta, an antibiotics and animal health group, urged other drastic changes to avert future financial scandals. The investigators proposed appointing a stock exchange ombudsman, limiting the power of major shareholders, establishing more clearly where the responsibility lay in a quoted company, and better access of information for the Stock Exchange and its auditors on a company's activities.

The report recommended that no single shareholder should account for more than 10 per cent of the votes at company meetings for choosing or dismissing a board member.

FT/AIBD INTERNATIONAL BOND SERVICE

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

STRAIGHT BONDS: Yield to redemption of the mid-price. Amount issued is expressed in millions of currency units except for Yen bonds, where it is in billions.
FLOATING RATE NOTES: US dollars unless indicated. Margin above six-month offered rate for US dollars. C.cpn=current coupon.
CONVERTIBLE BONDS: US Dollars unless indicated. Prem = percentage premium of the current effective price of buying shares via the bond over the most recent share price.
WARRANTS: Equity warrant price = exercise premium over current share price. Bond warrant ex yld = exercise yield at current warrant price. Closing prices on SEPTEMBER 2

UK COMPANY NEWS

Brent Walker backs £33m Elstree purchase

By Fiona Thompson

FILM MAKING at the famous Elstree Studios appears to have thwarted the final curtain, which had been due to fall next month.

Brent Walker, the fast growing leisure group headed by Mr George Walker, and Tranwood Earl, a small merchant bank, announced yesterday the formation of a joint venture to acquire Elstree Film Studios. The new company, Mainray, has exchanged contracts to purchase the 29 acre site in Hertfordshire for £32.5m in cash.

Although stopping short of a formal, public commitment to continue film production, it is clear that this is the group's intention. Brent Walker, in addition to its property development and leisure activities, has a strong presence in the film, television and video industries through both Goldcrest, its wholly-owned subsidiary, and its 28.5 per cent holding in Trillion.

Trillion, having just sold its Limehouse Studios in London's Docklands, will be relocating its film and television interests and an Elstree site would make good sense.

The future of film production at Elstree has been uncertain for some time. Cannon Group, owner of the film studios until July, said that all production would end in October.

In July, Cannon sold Elstree to Tranwood Earl, representing a consortium, for a price believed to be £20m.

Mr Walker said he was delighted to be involved in a project for which Brent Walker was so ideally suited.

Blue Arrow chief may launch a buy-out

By Fiona Thompson

MR TONY BERRY, chairman of Blue Arrow, the world's largest employment services group, yesterday confirmed that a group of American financial institutions would be prepared to fund him in a management buy-out, should he wish to consider it.

However, a buy-out was "only an option, along with many others we are reviewing," he stressed.

Mr Berry said that Dillon Read, his American investment bank, had held talks with a number of financial institutions in the US and last week Dillon "indicated that it was eminently possible" that over £1bn in finance could be made available.

Mr Berry has been unhappy with the performance of his shares for some time and when he was on holiday last month, Phillips & Drew, the group's broker, downgraded its profits forecast from £110m to £90m, resulting in Blue Arrow shares slumping to 88p, about half the price of last year's £837m rights issue.

A £1bn bid would value the shares at 140p, well up on Friday's close of 91p but short of the 166p rights price.

Wolstenholme Rink forecasts 39% rise

Wolstenholme Rink, fighting a hostile five-for-three share offer from Cookson Group, yesterday published a profits forecast in its final defence document.

For the year to December 31, Wolstenholme expects to achieve a 39 per cent rise in pre-tax profits to £4.2m, earnings per share up 30 per cent to 44p and a 50 per cent dividend increase to 15.5p.

The Cookson offer is now worth 397p per share, with a cash alternative of 410p. Wolstenholme shares stand at 478p.

Ruo Estates

Pre-tax losses of £246,000 against profits of £67,000 were announced by Ruo Estates Holdings, a subsidiary of Eastern Produce (Holdings), for the six months to December 31 1987.

The way the cookie crumbles

Philip Coggan looks at some tarnished US images on the USM

WHEN MRS Fields, the US cookie company, floated on the Unlisted Securities Market in 1986, chairman Mr. Randy Fields justified his choice of exchange by saying that he perceived London as the centre of the future international equity market.

After two years of disappointments, a Mrs Fields cookie now costs more than one of its shares. And the appalling record of US companies which have chosen London for their only share quotation, was further illustrated last week with news of a £5.7m loss from Pavion International, the manufacturer of Wet'n'Wild cosmetics.

So badly have such companies performed that investors will be "very suspicious" of any future US new issues, according to analyst Ms Marian MacBryde of Hoare Govett.

Why have US companies been so open to the criticism that they have been "over-hyped, overpriced and under-performing"? The ballyhoo which surrounded the Mrs Fields issue – which still left 84 per cent of the offer in the hands of the underwriters – may have contributed to the cynicism of UK institutions.

However, there have been plenty of other disappointments before and after the Mrs Fields offer. The first two US companies to join the USM, Nimslo, a 3-D camera maker, and Chemical Methods, a dishwasher manufacturer, were among the market's worst performers.

International Signal and Control, the defence contractor, lost around a quarter of its market capitalisation in one day last year, when its profits fell short of expectations. Within months, it had agreed to a merger with Ferranti.

Orchid Technology, a Californian software house, attempted to float in January last year, but the issue was abandoned when institutions proved less than enthusiastic. Three months later, the placing power of Phillips & Drew proved successful. But investors were right the first time. This year, Orchid revealed a 87.5 per cent decline in interim pre-tax profits and the shares now languish at less than a third of the original placing price.

US companies were attracted to the UK stock market, and particularly the USM, for a number of reasons. The first was cost. A USM float is estimated to absorb around 9 per cent of the capital raised at flotation, compared with about 20 per cent on Nasdaq, the US over-the-counter market.

Second, US securities laws do not allow companies to make a profits forecast in their prospectus. That makes it particularly difficult for small, fast-growing, companies to get the kind of rating they think they deserve.

For example, Mrs Fields was able to float on the back of a profits forecast which brought its prospective multiple down to the high teens. Its historic multiple, in contrast, was 50.

Third, the disclosure requirements on London's markets are less stringent than those in the US. That is particularly important for companies, such as International Signal and Pacer Systems, operating in the sensitive area of defence, who are rarely keen to reveal what they are selling to whom and for how much.

However, as Ms MacBryde says "there may be many benefits in a London listing but just because it is good for the company it doesn't make the shares a good buy for the institutions".

The US companies that have floated in London have generally fallen into three categories – electronics, oil and "one-product wonders" like Mrs Fields.

The US electronics sector hit problems about 18 months before its UK equivalent and many small companies were then faced with the further problem of cuts in the defence budget. In any case, the companies were inherently vulnerable, dependent either on one vital, and rapidly ageing, product, or on a few key members of staff.

Cost control was also a problem. Time and again, companies geared up for growth which did not occur. The latest example was the Californian-based Borland International, which last week laid off 90 of its 650-strong workforce in a bid to cut its spiralling overheads. First-quarter profits had been well down and the second quarter will record a loss.

Of course, UK electronics companies have suffered many of the same problems; similarly, the travails of US oil companies are of exactly the same kind as those of small UK oil exploration companies. The problem is the concentration of electronics and oil companies among London's US contingent.

But the troubles of oil and electronics cannot explain away the difficulties of companies as diverse as Mrs Fields, architects Tribble Harris Li or cosmetics manufacturer Pavion.

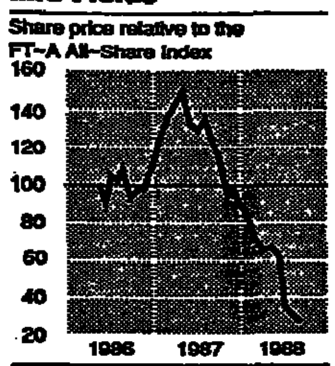
Is there a chance that US companies can restore their image? For the moment, it seems unlikely.

Mr Alistair Alcock, of Phillips & Drew, which has brought several US companies to market, says: "I'm sure that all the major UK houses would scrutinise any US company very, very carefully indeed."

And given investors' cynicism, the rating which a potential US new issue would attract in London might not be sufficiently enticing to persuade founder shareholders to take the plunge.

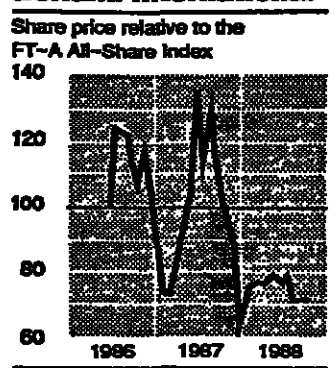
Mrs Fields

Share price relative to the FT–A All–Share Index



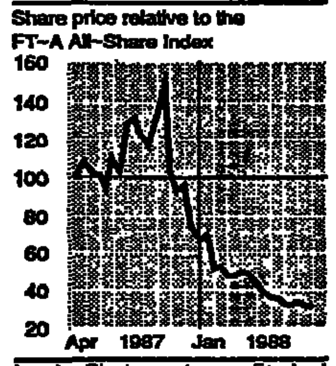
Borland International

Share price relative to the FT–A All–Share Index



Orchid Technology

Share price relative to the FT–A All–Share Index



GrandMet may expand betting side in the US

By Lisa Wood

Mecca Bookmakers, the betting division of Grand Metropolitan, is examining ways in which it could extend its operations in the US, the group confirmed yesterday.

Among the options being considered is the acquisition of an American racetrack or greyhound stadium as a bridgehead for off-track betting operations in the US.

GrandMet said that Mecca was seeking to expand its operations outside of the UK. Last month it announced a joint venture in Malaysia where it will operate a chain of betting shops under a licence from the Malaysian government.

Porvair expands midway

PORVAIR, the manufacturer of microporous plastic materials which returned to the stock market in May after a six-year absence, raised its first-half profits from £371,000 to £460,000 at the pre-tax level.

As outlined in the USM placing document there is no interim dividend, but the directors expect to recommend a final. Earnings for the opening half, to May 31, worked through at 4.8p (4p).

COMPANY NEWS IN BRIEF

BRISTOL WATERWORKS Company: Of the total £6m convertible redeemable preference shares 1988 provisionally placed with City institutions and subject to callback, 58.83 per cent will now be recalled to be allotted to subscribers, all of which will receive their full allocation. About 2,500 allotments will be made to consumers or employees of the company.

BRITISH GAS has applied for a listing of its ordinary shares on the Tokyo Stock Exchange. Subject to approval, dealings are expected to commence later this month.

KLEINWORT BENSON International Income Bond Fund: Profits before tax £3.25m (£2.63m) for year to end-August 1988. Final dividend 20.57p making 38p (31.78p) gross.

LONDON and St Lawrence Investment: At August 31 1988 asset value per ordinary share totalled 102.24p (previous month 104.88p).

POLYTECHNIC ELECTRONICS (USM-quoted manufacturer of navigation equipment): Turnover £7.86m (£2.95m) and pre-tax profits £1.13m (loss £847,000) for year to May 31 1988. Earnings 8.1p (losses 5.9p) per 5p share. Dividend 0.5p (nil). Over 70 per cent of profits generated in second half, reflecting both increased production capability and seasonal nature of marine leisure market. Bank borrowings have been eliminated and cash in hand amounts to £482,000, an improvement in liquidity of £1m.

BOARD MEETINGS

The following companies have notified dates of board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available as to whether the dividends are interims or finals and the sub-divisions shown below are based mainly on last year's timetable.

TODAY

Interims: Asda Property, Asset Communications, CPH, Cons. Venture Trust, Dagenham Motors, Edmond Hldgs., Equitable Clothes, Handley-Walker, Lionheart, Miller (Stanley), Parkinson, Pochin's, Quick Group.
Finals: Goodhead Print, Haynes Publishing.

FUTURE DATES

Interims:
Anglo American Gold Inv. .... Sept. 8
Bemrose .... Sept. 20
Capara Inds. .... Sept. 14
Daniels (S) .... Sept. 9
Jacksons Bourne End .... Sept. 14
Legal & General .... Sept. 14
London Forfaiting .... Sept. 14
Magnom Grp. .... Sept. 8
Raeburn Grp. .... Sept. 15
Ransom Hldgs. .... Sept. 8
Shorco Grp. .... Sept. 7
Sutherland Hldgs. .... Sept. 12
Tibbett & Britten .... Sept. 14

Finals:
Barratt Dev. .... Sept. 21
Brent Walker .... Sept. 8
Dale Grp. .... Sept. 12
Dolphin Packaging .... Sept. 13
Sheldon Jones .... Sept. 8
Thornton .... Sept. 16

PUBLIC WORKS LOAN BOARD RATES

Effective August 31

Years	Quota loans A* by EPP	A††	At maturity§	Non-quota loans B* by EPP	A††	At maturity§
1	11¾					12¼
Over 1 up to 2	11⅞	11⅝	10⅞	12⅜	12⅛	11⅛
Over 2 up to 3	11¼	11	10¾	12⅜	12	11⅛
Over 3 up to 4	10⅞	10¾	10⅝	11⅞	11¾	11⅛
Over 4 up to 5	10¾	10⅝	10⅝	11¾	11⅝	11⅛
Over 5 up to 6	10⅝	10½	10⅝	11⅝	11½	11⅛
Over 6 up to 7	10⅝	10½	10⅝	11⅝	11½	11⅛
Over 7 up to 8	10⅝	10½	10⅝	11½	11½	11
Over 8 up to 9	10⅝	10½	10½	11½	11⅜	11
Over 9 up to 10	10⅝	10½	10½	11⅝	11⅜	10⅞
Over 10 up to 15	10⅜	10	10⅜	11⅜	11	10⅞
Over 15 up to 25	10¼	9⅞	10⅜	10⅞	10⅞	10⅝
Over 25	9⅞	9¾	9⅞	10⅞	10⅝	10⅝

*Non-quota loans B are 1 per cent higher in each case than non-quota loans A. †Equal instalments of principal. ††Repayment by half-yearly annuity (fixed equal half-yearly payments to include principal and interest). § With half-yearly payments of interest only.

FT Share Service

The following securities were added to the Share Information Service in Saturday's edition:
Cakebread Robey A (Section: Buildings).
Sphere Investment Trust Warrants (Investment Trusts).
Texas Instruments (Americans).

Severfield rises 34%

HAVING joined the USM in June, at the end of its first half, Severfield-Reeve reported interim pre-tax profits advanced to £535,000, against £400,000 a rise of 34 per cent. Turnover at this maker and erector of structural steelwork and specialist claddings was 21 per cent higher at £4.28m.

Earnings per share increased to 4.13p (3.15p) and the directors have declared a maiden interim dividend of 0.75p.

Armitage Brothers

Second half losses of £188,000 against £43,000 profits reduced the pre-tax result of Armitage Brothers from £615,000 to £80,000 for the year to May 28. Turnover was £15.63m (£17m).

The directors of this Nottingham-based pet products manufacturer are holding the dividend at 4.5p, however, with an unchanged final of 2.5p. Earnings fell from 10.2p to 1p.

A & C Black improves

A & C Black, publisher, improved pre-tax profits by £28,000 to £352,000 in the six months ended June 30 on turnover ahead by 18 per cent from £2.39m to £2.82m.

The interim dividend is lifted to 4p (3.75p). Earnings per share rose from 15.6p to 16.9p after tax of £123,000 (£113,000).

AMBROSE INVESTMENT Trust: At August 31 1988 asset value per capital share was 580.37p (615.49p July 31).

FINANCIAL TIMES STOCK INDICES

	Sep. 2	Sep. 1	Aug. 31	Aug. 30	Aug. 26	Aug. 25	1988 High	1988 Low	Since Compilation High	Since Compilation Low
Government Secs.	86.28	86.48	86.54	86.72	86.83	87.34	91.43	86.28	127.4	49.18
Fixed Interest	95.62	95.87	96.72	96.85	96.86	97.03	98.67	94.14	105.4	50.53
Ordinary	1405.9	1391.6	1409.4	1409.9	1425.4	1432.6	1514.7	1349.0	1926.2	49.4
Gold Mines	191.4	193.1	194.1	197.2	200.1	199.1	312.5	187.8	734.7	43.5
FT-Act All Share	906.74	898.42	911.17	911.07	921.68	928.91	978.58	870.19	1238.57	61.92
FT-SE 100	1746.9	1730.5	1753.6	1754.8	1770.7	1780.2	1879.3	1694.5	2443.4	986.9

FT UNIT TRUST INFORMATION SERVICE

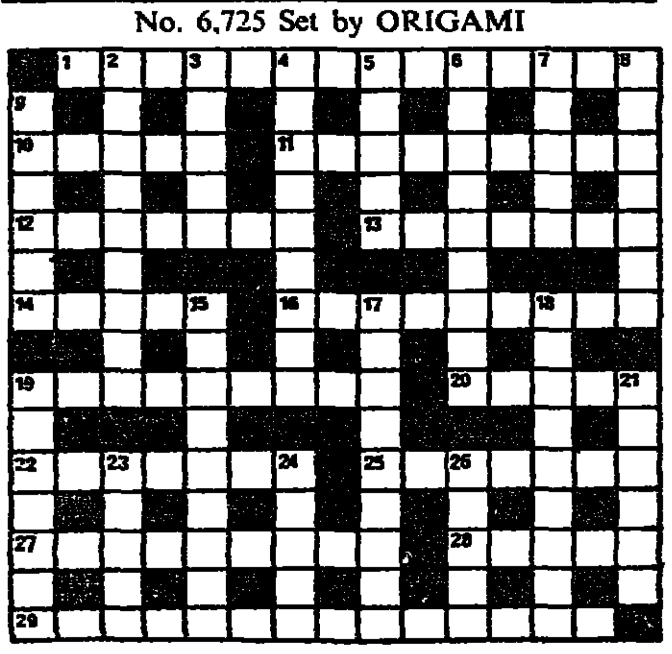
AUTHORISED UNIT TRUSTS

[illegible]

JOTTER PAD

CROSSWORD

No. 6,725 Set by ORIGAMI



ACROSS

1 Sex is disturbing and even in a regiment creates disorder (5,3,6)
10 Use some arithmetic in guessing the surface of a cake (5)
11 Forty two tents (6,3)
12 Divide two bits (7)
13 Directions to 150 Roman Way; it's in hostile surroundings (7)
14 Film held an unusual long shot: it's only to be the result (5)
16 I bored the big shot (4,2,3)
19 Current holder with records in fives, tens and twenties (4,5)
20 Counted on under the counterpane (5)
22 Heavy metal with no score but fortissimo start (4,3)
25 Give a duck to a fellow getting a boundary: it's a crime (7)
27 Desired woman who made love in a Martian shuttle (9)
28 Make amends at lunchtime (5)
29 The normal way of telling monks perhaps (9,5)

DOWN

2 I'm one, Jacques one, almost, though only a copy (9)
3 American soldier put up with the embracing sportsmen (5)
4 Barracks halt reds with zero agitation (9)
5 River held copper up going like the devil (5)
6 Like those choosing the best, cricket club select one stranger (9)
7 Insignificant part of cricket score (5)
8 From highest authority – discharge revolutionary part of army (7)
9 Chopped quince to go with type of port (6)
15 A number tour about the Foreign Office for a time (3,2,4)
17 The French way to love on a trip chasing the field (4,2,3)
18 A sum like 12 x 3 – 5 (3,3,3)
19 Will adding one on make a big total? (7)
21 Fractions like 22/7 with a second up to one point (6)
23 Start with a number a right number (5)
24 French article about currency (5)
26 Fifty in entertainment showing talent (5)

The solution to last Saturday's prize puzzle will be published with names of winners on Saturday September 17.

GUIDE TO UNIT TRUST PRICING

The data included under the Authorised section of the FT Unit Trust Information pages is being expanded to improve the service to readers and to conform with new legislation.

INITIAL CHARGES
These represent the marketing, administrative and other costs which have to be paid by new purchasers. These charges are included in the price when the customer buys units.

OFFER PRICE
The price at which units may be bought.

BID PRICE
The price at which units may be sold.

CANCELLATION PRICE
The maximum spread between the offer and bid prices is determined by a formula laid down by the government. In practice, unit trust managers quote a much narrower spread. As a result, the bid price is often set well above the minimum permissible price which is called the cancellation price in the table. However the bid price might be moved to the cancellation price in circumstances in which there is a large excess of sellers of units over buyers.

TIME
The time shown alongside the fund manager's name is the time at which the unit trusts' daily dealing prices are normally set unless another time is indicated by the symbol alongside the individual unit trust name. The symbols are as follows: ▼ - 0001 to 1100 hours; ♦ - 1101 to 1400 hours; ▲ - 1401 to 1700 hours; ● - 1701 to midnight.

HISTORIC PRICING
The letter H denotes that prices are set on a historic basis. This means that, unless there has been an intervening portfolio revaluation, investors can normally buy and sell units today at the prices appearing in the newspaper which have been set on the basis of yesterday's asset value.

FORWARD PRICING
The letter F denotes that prices are set on a forward basis so that investors can be given no definite price in advance of the purchase or sale being carried out. The prices appearing in the newspaper show the prices at which deals were carried out last Friday.
Other explanatory notes are contained in the last column of the FT Unit Trust Information pages.

FT UNIT TRUST INFORMATION SERVICE

Swiss Life Pen Tst Man Co Ltd (1000)H
99-101 London Rd, Sevenoaks 0732 450161

Unit Name	Init Chrge	Canc. Price	Bid Price	Offer Price	Yield Grs	City-line
Equity Dist	5	312.5	317.1	335.6	3.12	[illegible]
Equity Acc	5	401.1	407.1	430.8	3.12	[illegible]
Fixed Int Dist	5	114.2	116.2	120.4	[illegible]	[illegible]
Fixed Int Acc	5	202.5	206.0	[illegible]	[illegible]	[illegible]

TSB Unit Trusts (y) (1000)F
Charlton Pl, Andover, Hants, SP10 1RE 0264 63434

Unit Name	Init Chrge	Canc. Price	Bid Price	Offer Price	Yield Grs	City-line
TSB American	5	97.12	97.12	103.29	2.21	[illegible]
Do Accum	5	104.24	104.24	110.82	2.21	[illegible]
TSB Brit Growth	5	51.97	51.97	55.29	3.26	[illegible]
Do Accum	5	53.66	53.66	57.09	3.26	[illegible]
TSB European	5	48.24	48.24	51.32	1.30	[illegible]
Do Accum	5	49.56	49.56	52.72	1.30	[illegible]
TSB Extra Income	5	140.34	142.12	151.19	5.95	[illegible]
Do Accum	5	[illegible]	[illegible]	195.16	5.95	[illegible]
TSB Smaller Cos	5	52.00	51.00	54.26	1.26	[illegible]
Do Accum	5	51.90	51.90	55.21	1.26	[illegible]
TSB General	5	167.15	167.15	177.82	3.33	[illegible]
Do Accum	5	289.34	289.34	307.81	3.33	[illegible]
TSB Gilt & Fxd Int	3½	46.40	46.40	47.99	9.18	[illegible]
Do Accum	3½	70.05	70.05	72.49	9.18	[illegible]
TSB Income	5	248.60	248.60	264.47	5.29	[illegible]
Do Accum	5	415.54	415.54	442.06	5.29	[illegible]
TSB Pacific	5	[illegible]	199.34	212.06	0.33	[illegible]
Do Accum	5	206.34	207.25	220.48	0.33	[illegible]
TSB International	5	311.01	312.00	331.92	1.06	[illegible]
Do Accum	5	[illegible]	392.47	417.52	1.06	[illegible]
TSB Nat Resources	5	60.66	60.66	64.53	2.41	[illegible]
Do Accum	5	63.76	63.76	67.83	2.41	[illegible]
TSB Stcd Opps	5	76.40	76.40	81.28	2.46	[illegible]
Do Accum	5	86.10	86.10	92.60	2.46	[illegible]

Target Trust Mngrs Ltd (1400)H
Target Hse, Gatehouse Rd, Aylesbury, Bucks.
Admin: 0296 394000 Dealing: 01-379 0960

Unit Name	Init Chrge	Canc. Price	Bid Price	Offer Price	Yield Grs	City-line
American Eagle	5	61.45	61.45	65.76	0.90	[illegible]
Australia	5	7.595	7.595	8.112	0.10	—
Commodity	5	75.89	75.89	81.04	0.61	[illegible]
Convertible	5	139.9	139.9xd	150.7	5.07	[illegible]
Equity	5	143.1	143.1	154.0	3.39	[illegible]
Euro Spec Sits	5	76.17	76.17	82.06	1.66	[illegible]
Financial	5	29.66	29.66	31.96	2.13	[illegible]
Global Opps Inc	5	54.63	54.63	58.89	0.63	[illegible]
Global Opps Acc	5	54.63	54.63	58.89	0.63	[illegible]
Gold Income	5	51.70	51.70	55.45	0.00	[illegible]
Gold Acc	5	95.23	95.23	102.1	0.00	[illegible]
Income	5	99.92	99.92xd	107.6	4.72	[illegible]
Japan	5	112.7	112.7xd	121.3	0.00	[illegible]
Pacific Inc	5	108.7	108.7xd	[illegible]	0.04	[illegible]
Pacific Acc	5	134.9	134.9	145.2	0.04	[illegible]

[illegible]

MIM Ltd

	Bid Price	Offer Price	Yield Gross	City-line
Mngd Pens (Acc)	53.3	56.8	0.80	[illegible]

Murray Johnstone UT Mngmt
Murray Exempt Funds

	Bid Price	Offer Price	Yield Gross	City-line
Amer Expt Aug 31	39.5	41.0	2.25	[illegible]
Euro Expt Aug 31	38.7	40.6	2.56	[illegible]
Fixed Int Ex Aug 31	48.1	50.4	9.68	[illegible]
Japan Expt Aug 31	52.3	54.4	0.56	[illegible]
Managed Ex Sept 1	38.2	39.7	4.65	[illegible]
SE Asia Expt Aug 31	36.1	37.9	2.44	[illegible]
Sm Cos Expt Aug 31	43.4	45.5	2.59	[illegible]
UK Eqty Ex Aug 31	34.7	36.4	3.97	[illegible]

New Court Property Fund Managers

	Bid Price	Offer Price	Yield Gross	City-line
NC Property	189.5	199.5	—	[illegible]

Phillips & Drew Fnd Management Ltd

	Bid Price	Offer Price	Yield Gross	City-line
PDFM Small Co Fd	812.0	862.0	3.50	[illegible]
Do Accum	838.0	890.0	3.50	[illegible]
PDFM Int Expt Aug 25	122.9	124.9	2.62	[illegible]

J. Rothschild Fund Managers Ltd

	Bid Price	Offer Price	Yield Gross	City-line
Intl Exempt	91.60	92.75	2.98	[illegible]

INSURANCES

AA Friendly Society
Investment Magt M & G Inv Mngt Ltd

	Bid Price	Offer Price	Yield Gross	City-line
AA Eqty Sr Aug 12	—	140.91	—	[illegible]

Abbey Life Assurance Co Ltd
80 Holdenhurst Road, Bournemouth 0202 292[illegible]

	Bid Price	Offer Price	Yield Gross	City-line
Prop. Ser. 1	257.3	270.9	—	[illegible]
Equity Ser. 1	108.8	114.6	—	[illegible]
Prop. Acc. Ser 2	372.6	392.3	—	[illegible]
Equity Ser 2	123.6	130.2	—	[illegible]
Selective Acc.	282.8	297.7	—	[illegible]
Prop. Ser. 4	292.6	308.1	—	[illegible]
Equity Ser. 4	128.0	134.8	—	[illegible]
Fixed Int. Ser. 4	209.8	221.0	—	[illegible]
Indexed Inv. Ser. 4	120.5	127.0	—	[illegible]
American Ser. 4	256.5	270.1	—	[illegible]
High Inc. Ser. 4	363.9	383.1	—	[illegible]
Japan Ser 4	263.3	277.2	—	[illegible]
Man. Ser. 4	[illegible]	[illegible]	—	[illegible]

[illegible]

OTHER UK UNIT TRUSTS

[illegible]

Continued on next page

FT UNIT TRUST INFORMATION SERVICE

	Bid Price	Offer Price	Yield Gross	City-line
Phoenix Assurance Co Ltd				
Phoenix House, Redcliff Hill, Bristol 0272 294941				
Life Assurance Funds				
Wealth Assd	382.3	402.5	–	43248
Ebr Ph. Eq	344.2	366.6	–	43249
Pension Plan Funds				
Phoenix				
UK Equity Acc	162.3	170.8	–	43250
International Acc	139.4	146.7	–	43251
Property Acc	146.2	153.0	–	43252
Fixed Interest Acc	152.8	160.8	–	43253
Money Acc	143.3	150.8	–	43254
Bldg Soc Link Acc	140.2	147.5	–	43255
Special Mngd Acc.Q	148.9	156.7	–	43256
Phoenix/Framlington				
Intnl Growth Acc	86.50	91.00	–	43257
Am. Smllr. Cos. Acc	87.40	91.90	–	43258
Capital Tst Acc	170.3	179.2	–	43259
Japan & Gen Acc	184.6	194.3	–	43260
American Turn. Acc	96.50	101.5	–	43261
Recovery Tst Acc	173.4	182.5	–	43262
Special Mngd Acc	145.8	153.4	–	43263
Phoenix/GT				
International Acc	129.9	136.7	–	43264
US & General Acc	86.20	90.70	–	43265
Amer Spec Sits Acc	65.80	69.20	–	43266
Japan & General Acc	188.3	198.2	–	43267
Far East & Gen Acc	135.3	142.4	–	43268
UK Capital Acc	168.8	177.6	–	43269
European Acc	140.1	147.4	–	43270
Special Mngd Acc	124.6	131.1	–	43271
Pioneer Mutual Insurance Co Ltd				
16 Crosby Rd N. Waterloo, Liverpool 051-928 6655				
Managed Fund	256.7	270.3	–	43272
Man Pen Inc & Cap Fd	323.8	340.9	–	43273
Money Fund	113.9	119.9	–	43274
Pens. Mngd Fd (Init)	86.4	91.0	–	43275
Pens Mngd Fd (Acc)	100.0	105.3	–	43276
Pens FT30 Fd (Init)	121.8	128.3	–	43277
Pens FT30 Fd (Acc)	141.0	148.5	–	43278
Pens O'seas MgFd (Init)	59.2	62.4	–	43279
Pens O'seas MgFd (Acc)	68.6	72.3	–	43280
Pens Fxd Int Fd (Init)	101.0	106.4	–	43281
Pens Fxd Int Fd (Acc)	116.9	123.1	–	43282
Pens Deposit Fd (Init)	101.7	107.1	–	43283
Pens Deposit Fd (Acc)	117.7	123.9	–	43284
Premium Life Assurance Co Ltd				
37-39, Perrymount Road Haywards Heath 0444 458721				
American	98.0	104.0	–	43285

	Bid Price	Offer Price	Yield Gross	City-line
Provident Mutual Life Assc. Assn.				
Willian Rd, Hitchin, Herts SG4 0LP 0438 739000				
Managed Ord	279.1	293.8	–	43484
Managed Init	230.2	242.3	–	43485
Equity Ord	387.0	407.4	–	43486
Equity Init	319.2	336.0	–	43487
Index Linked Gilt Ord	121.8	128.2	–	43488
Index Linked Gilt Init	104.9	110.4	–	43489
Overseas Equity Ord	249.8	262.9	–	43490
Overseas Equity Init	206.0	216.8	–	43491
Property Ord	172.1	181.2	–	43492
Property Init	142.0	149.5	–	43493
Fixed Interest Ord	166.4	175.2	–	43494
Fixed Interest Init	137.3	144.5	–	43495
Deposit Ord	135.5	142.6	–	43496
Deposit Init	111.8	117.7	–	43497
Pension Funds				
Managed Ord	335.7	353.4	–	43498
Managed Init	276.9	291.5	–	43499
Equity Ord	482.2	507.6	–	43500
Equity Init	397.7	418.6	–	43501
Pen Ind Lnd Gilt Ord	131.3	138.2	–	43502
Pen Ind Lnd Gilt Init	113.1	119.1	–	43503
Overseas Equity Ord	281.9	296.7	–	43504
Overseas Equity Init	232.5	244.7	–	43505
Property Ord	201.6	212.2	–	43506
Property Init	166.2	174.9	–	43507
Fixed Interest Ord	188.6	198.5	–	43508
Fixed Interest Init	155.5	163.7	–	43509
Deposit Ord	169.2	178.1	–	43510
Deposit Init	139.5	146.8	–	43511

For Provincial Life Ass Co Ltd see Prolific Life & Pensions Ltd

	Bid Price	Offer Price	Yield Gross	City-line
Prudential Assurance Co				
Holborn Bars, London EC1N 2NH 01-405 9222				
Prufund				
Managed Aug 31	203.3	211.8	–	43512
Prudential Holborn Life Ltd				
30 Old Burlington St, London W1X 1LB 01-439 3134				
Holborn Series I Life Funds				
Managed	430.7	453.4	–	–
Equity	856.2	901.3	–	–
Fixed Interest	366.7	386.1	–	–
Property	352.8	371.4	–	–
Cash	245.1	258.0	–	–
International	297.3	313.0	–	–
Holborn Series II Life Funds				
Managed	422.7	445.0	–	43513
Equity	839.1	883.3	–	43514

MANAGEMENT SERVICES

OFFSHORE AND OVERSEAS

UK LISTED

OFFSHORE INSURANCES

FT UNIT TRUST INFORMATION SERVICE

LONDON SHARE SERVICE

BRITISH FUNDS

Amount £m	Stock	Price £	Red. Yld.	Last xd	Interest Due	City-line
	"Shorts" (Lives up to Five Years)					
41	Redemption 3pc 1986-96	99¼xd	—	25.8	1Apr 1Oct	1278
2,050	Treas. 9½pc '88	99 15/32	12.00	21.3	25Apr 25Oct	1346
2,250	Treas 11½pc 1989	99¾	11.91	18.7	22Aug 22Feb	1291
855	Treas 9½pc Cnv 1989	98 13/32	11.73	14.3	18Oct 18Apr	1348
500	Treas 3pc 1989	96	9.10	8.4	15Nov 15May	1327
1,400	Treas 10½pc 1989	99	11.66	9.5	14Dec 14Jun	1287
2,400	Exch.10pc 1989	98	11.42	27.6	1Feb 1Aug	1250
2,000	Exch 11pc 1989	99xd	11.35	23.8	29Mar 29Sep	1256
601	Treas 5pc 1986-89	94	10.04	9.3	15Apr 15Oct	1329
535	Exch 10¼pcCv '89	98¼	11.01	8.4	15May 15Nov	1255
1,000	Treas 13pc 1990‡‡	102½	10.82	8.6	15Jul 15Jan	1300
1,400	Exch 11pc 1990‡‡	100	10.74	6.7	12Aug 12Feb	1257
1,250	Exch. 12½pc 1990	102xd	10.91	16.8	22Sep 22Mar	1262
550	Treas. 3pc 1990	90	9.10	5.4	8Nov 8May	1325
600	Treas 8¼pc 1987-90‡‡	96	10.76	9.5	15Dec 15Jun	1340
1,000	Treas. 8pc Cv 1990 ‡‡	95¾	10.40	9.6	16Jul 16Jan	4680
1,887	Treas. 10pcCv 1990	98¼	10.80	21.3	25Apr 25Oct	1285
500	Exch 2½pc 1990	87	8.88	15.4	22May 22Nov	1270
2,200	Treas 11¾pc 1991	101	10.76	3.6	10Jul 10Jan	1292
400	Funding 5¾pc '87-91‡‡	90xd	10.08	1.9	5Oct 5Apr	1275
400	Treas. 3pc 1991	86	8.82	6.4	13Nov 13May	1326
646	Treas 10pc Cv '91 ‡‡	98	10.54	6.6	12Jan 12Jul	1286
1,550	Exch. 11pc 1991	100	10.65	21.3	25Apr 25Oct	1258
1,350	Treas. 8pc 1991	92	10.62	4.5	10Jun 10Dec	1335
900	Treas 12¾pc 1992‡‡	105	10.54	15.6	22Jul 22Jan	1297
1,600	Treas 10pc 1992	98¼	10.49	15.7	21Aug 21Feb	1283
1,400	Treas. 8pc 1992 ‡‡	92	10.61	7.3	13Oct 13Apr	1337
1,288	Treas 10½pc Cv 1992‡‡	99	10.53	31.3	7Nov 7May	1289
500	Treas. 3pc 1992	82	8.56	5.5	11Dec 11Jun	1328
1,350	Exch. 12¼pc '92	105	10.59	19.7	25Feb 25Aug	1265
1,757	Exch 13½pc 1992	109xd	10.69	16.8	22Mar 22Sep	1266
950	Treas 8¼pc 1993	91	10.57	12.7	18Aug 18Feb	—
1,850	Treas 10pc 1993‡‡	97	10.54	9.3	15Oct 15Apr	1279
1,100	Treas 12½pc 1993‡‡	107	10.52	7.6	14Jan 14Jul	1296
	Five to Fifteen Years					
600	Funding 6pc 1993‡‡	88xd	8.97	9.8	15Mar 15Sep	1276
1,250	Treas 13¾pc 1993‡‡	112	10.58	18.4	23May 23Nov	1304
1,050	Treas. 8½pc 1994	91	10.51	27.6	3Aug 3Feb	—
750	Tr 8½pc 1994 'A' (50% pd)	41	10.53	—	3Feb 3Aug	—
600	Treas 14½pc 1994‡‡	116	10.56	26.7	1Sep 1Mar	1307
1,100	Exch 13½pc 1994	111	10.67	21.3	27Oct 27Apr	1267
1,400	Treas. 10pc Ln. 1994‡‡	98¼	10.43	3.5	9Dec 9Jun	1284
1,550	Exch. 12½pc 1994	107	10.66	18.7	22Feb 22Aug	1263
1,600	Treas 9pc 1994‡‡	94	10.35	11.4	17May 17Nov	1345
2,350	Treas 12pc 1995	106	10.63	20.6	25Jul 25Jan	1294

BRITISH FUNDS—Contd

Amount £m	Stock	Price £	Red. Yld.	Last xd	Interest Due	City-line
	Undated					
359	Consols 4pc	42¼	—	27.6	1Feb 1Aug	1299
1,909	War Loan 3½pc‡‡	37½	—	25.4	1Jun 1Dec	1352
154	Conv. 3½pc '61 Aft	53¾xd	—	25.8	1Apr 1Oct	1243
56	Treas. 3pc '66 Aft	31½xd	—	1.9	5Apr 5Oct	1324
276	Consols 2½pc	26xd	—	1.9	5Ja Ap Jul O	1238
475	Treas. 2½pc	26xd	—	25.8	1Apr 1Oct	1315
	Index-Linked	(b)	**			
500	Treas 2pc IL '90(84.6)	120½	3.40	20.6	25Jul 25Jan	1311
650	Do. 2pc '92‡‡(97.8)	101¼xd	3.45	17.8	23Mar 23Sep	1312
400	Do. 2 '94 (102.9)	93	3.54	—	16Nov 16May	—
1,000	Do. 2pc '96(67.9)	136xd	3.54	10.8	16Mar 16Sep	1313
900	Do 2½pc '01(78.3)	112xd	3.98	18.8	24Mar 24Sep	1316
800	Do. 2½pc '03(78.8)	110½	3.99	13.4	20Nov 20May	1317
1,200	Do. 2pc '06(69.5)	111	3.98	13.6	19Jan 19Jul	1314
950	Do. 2½pc '09(78.8)	104	3.98	13.4	20Nov 20May	1318
1,350	Do. 2½pc '11(74.6)	108	3.98	18.7	23Feb 23Aug	1319
1,100	Do. 2½pc '13(89.2)	89¼	3.96	11.7	16Feb 16Aug	1320
1,700	Do. 2½pc '16(81.6)	96¾	3.91	20.6	26Jan 26Jul	1321
1,400	Do. 2½pc '20(83.0)	94¾	3.85	10.3	16Oct 16Apr	1322
900	Do. 2½pc '24‡‡(97.7)	79¼	3.82	10.6	17Jan 17Jul	1323

**Prospective real redemption rate on projected inflation of 5%. (b) Figures in parentheses show RPI base month for indexing. (ie 8 months prior to issue) and have been adjusted to reflect rebasing of RPI to 100 in January 1987. Conversion factor 3.945. RPI for December 1987:103.3 and for July 1988:106.7

INT. BANK AND O'SEAS GOVT STERLING ISSUES

Amount £m	Stock	Price £	Red. Yld.	Last xd	Interest Due	City-line
50	African Dv Bk 11¼ Ln 2010	102¾	10.86	2.6	4Jan 4Jun	—
100	Asian Dev Bk 10¼pcLn2009	98¼	10.47	24.3	24Mar 24Sep	—
100	Australia 13½pc 2010	123	10.74	24.6	28Jan 28Jul	—
100	Do. 11½pcLn2015	106½	10.63	24.3	26Apr 26Oct	—
75	Euro Inv Bk 11pc Ln 2002	103	10.48	23.2	23Mar 23Sep	—
100	Do. 10¾pc2004	98	10.51	22.4	22Mar 22Nov	—
75	Int-Am Dev Bk 12¼pc 2003	113	10.61	6.6	8Jan 8Jul	—
175	Do. 9¾pcLn 2015	93¾	10.51	13.4	15May 15Nov	—
75	Mlysia 10¾pcLn 2009	95xd	11.38	27.6	31Jan 31Jul	—
50	Utd. Mexican States 16½pc 2008	108xd	15.34	27.7	1Mar 1Sep	—

CORPORATION LOANS

COMMONWEALTH & AFRICAN LOANS

LOANS

Building Societies

Public Board and Ind.

Financial

FOREIGN BONDS & RAILS

Amount £m	Stock	Price £	Div % Gross	Yld	Last xd	Interest Paid	City-line
7	Greek 7pc Ass	45	3.50	7.78	3.5	1May 1Nov	2763
4	Do. 6pc 28 Stb. Ass	45xd	3	6.67	1.8	1Feb 1Aug	2762
—	Do 4pc Mixed Ass	45xd	2	4.44	5.4	1Apr 1Oct	2761
1	Hong. '24 Ass	75	2.75	3.67	3.5	1May	2935
40	Hydro Quebec 15pc 2011	132¾	15.00	11.03	28.4	31May 30Nov	—
30	Iceland 14½pc Ln 2016	124	14.50	11.52	4.1	31Jan 31Jul	—
30	Ireland 9¾pc '91-96	95xd	9.75	10.70	1.8	1Mar 1Sep	3002

AMERICANS

Market Cap. £m	Stock	Price £	Div Gross	Y'ld Gr's	Last xd	Dividends Paid	City-line
6,257.7	Abbott Laboratories‡	27½xd	$1.20	2.6	12.7	Fb My Ag Nv	1503
224.2	♥Allegheny & W 1c	434p	30c	4.1	—	—	—
1,559.0	Amax $1	12¼	Q20c	0.9	5 8	Mr Jn Se De	1581
1,746.9	Amdahl 5c	23¾	20c	0.5	10.8	Mr Jn Se De	—
2,621.4	Amer. Cyanamid $5	28½	$1.20	2.5	22.2	Mr Je Se De	—
8,333.0	Amer. Express 60c	16¼xd	76c	2.7	4 7	Fb My Ag Nv	1594
804.8	Amer. Medical Int. $1	990p	♦72c	4.3	11.1	Fb My Au Nv	—
15,702.6	American T. & T. $1	14¾	$1.20	4.8	27.5	Fb My Ag Nv	1597
7,523.2	Ameritech $1	53¼	$5.40	5.9	27.6	Fb My Ag Nv	—
459.1	Amfac‡	27¾	—	—	11 '84	Mr Jn Se De	—
5,384.8	Anheuser-Busch $1	17	60c	2 0	4 8	Mr Jn Se De	1620
1,315.3	BankAmerica $1	812p	—	—	11 '85	Fe My Au No	1744
1,739.7	Bankers N.Y. $1	22	$1.86	5.0	26 3	Ap Jly Oc Jan	1745
8,097.1	Bell Atlantic $1	40¾	$4.08	5.9	27 6	Fe My Au No	—
11,370.0	BellSouth Corp.	23¾	$2.36	5.9	6 7	Fe My Au No	—
910.7	♥Bethlehem Steel $8	12¼	—	—	4.11	Mar Jun S D	1821
—	Bio-Rad Labs. Inc. "A"	11	—	—	—	—	—
642.6	Bowater Inc	17½xd	92c	3 1	7 6	Oc Ja Ap Jy	1884
2,195.7	Browning-Ferris 16.6c	14xd	48c	1.9	14 5	Ja Ap Jly O	1986
1,003.3	Brunswick 75c	11¼	44c	2.3	20 7	F My Au N	1989
2,283.5	CPC Intnl. 25c	27¾	$1.44	3.0	25.9	Jan Ap Jly O	2263
2,377.7	CSX $1	15¼	$1.24	4.8	22.2	M J.S D.	—
388.0	CalFed Inc $1	13xd	$1 40	6.3	23.8	Mr Je Se Dc	—
2,047.5	Campbell Soup 15c	15xd	84c	3.1	4 1	Oc Ja Ap Jy	—
1,359.6	Caterpillar Inc $1	33¼	75c	1 3	20 4	F My Au N	—
1,397.9	Chase Manhattan $12½	17½xd	$2.16	7.4	27.7	Fb My Ag Nv	2109
1,682.7	Chem. Banking Corpn.	19	$2 72	8.4	6.6	Ap Jy Oc Ja	—
2,982.7	Chrysler $6¼	13½xd	$1 00	4 3	10 5	Mar Jun S D	2135
4,451.9	Citicorp $1	14xd	$1 48	6 2	26 7	My Au N F	2141
3.93	CityFed Fin. Corp.	186p	4c	1.3	29 10	Fb My Ag Nv	—
1,733.7	Colgate-Palmolive $1	25½xd	$1.48	3.5	20 7	F My Au N	2134
669.2	Cons Freightways 62½c	17¾	98c	3 2	3.11	Fe My Au Nv	—
141.2	Contl Illinois Corp $1	358p	8c	1 3	2.12	Dc Mr Ja Sp	—
17.7	Cont. Illinois Hldgs $1	7¼p	—	—	—	Mr Ja Se De	—
—	♥Corporate Data Scnce.	417p	—	—	—	—	—
104.0	Cullinet Sftwr 1c	322p	—	—	—	—	—
940.9	Dana Corp. $1	21xd	$1.53	4.3	30.8	Mr Je Se De	2306

Continued on next page

OTHER OFFSHORE FUNDS

Money Market Trust Funds

Money Market Bank Accounts

LONDON SHARE SERVICE

AMERICANS—Contd

Market Cap. £m	Stock	Price £	Div Gross	Y'ld Gr's	Last xd	Dividends Paid	City-line
2,339.9	Texas Instr. $1	23⅝	72c	1.8	27.6	JAJO	–
5,377.7	Time Inc. $1	56⅞xd	$1.00	1.0	25.8	Mr Ju Se De	4234
1,542.0	Transamerica $1	20¼xd	$1.84	5.3	29.5	Ja Ap Ju Oc	4289
508.3	TRINOVA Corp	14⅞xd	64c	2.5	10.8	Mc Je Se De	4309
5,013.6	USX $1	16⅞	$1.20	4.3	2.8	Mr Je Se De	4380
2,852.8	Utd. Technologies	21¼xd	$1.60	4.3	24.8	Mr Ju Sp Dc	4381
6,512.1	US West§	32⅛	$3.52	6.4	13.4	Fb My Ag No	–
4,962.0	Waste Management $1	22xd	48c	1.3	17.5	Ap Jy Oc Jan	4439
1,021.3	Whirlpool $1	14⅝	$1.10	4.4	25.01	Mr Ju Se De	–
1,880.0	♦Woolworth $3½	28⅝	$1.64	3.4	19.11	Mr Je Se De	4540

CANADIANS

Market Cap. £m	Stock	Price £	Div Gross	Y'ld Gr's	Last xd	Dividends Paid	City-line
–	ABM Gold Corp §	200p	–	–	–	–	–
–	♦Abbot Energy Corp	13½p	–	–	–	–	–
597.6	♦Amer. Barrick Res.	18⅝	–	–	–	–	–
–	American Lightwave	3⅛p	–	–	–	–	–
–	♦Arimeno	15p	–	–	–	–	–
–	Augmitto Expln.	48½p	–	–	–	–	–
1,364.5	Bk. Montreal §	13⅛	$2.00	7.4	8.8	Fb My Ag Nv	–
1,116.3	Bk. Nova Scot. §	673p	76c	5.5	28.6	Ja Ap Ju Oc	–
4,795.8	BCE §	17¼xd	$2.44	6.7	6.6	Ap Jy Oc Ja	–
271.3	♦Bow Valley§	655p	♦40c	3.0	15.12	May Nov.	–
763.8	♦Brascan§	11⅛	88c	3.8	28.10	Ja Ap Jy Oc	–
50.4	♦Breakwater Res.	225p	10c	2.2	–	–	–

BANKS, HP & LEASING

Hire Purchase, Leasing, etc.

BEERS, WINES & SPIRITS

BUILDING, TIMBER, ROADS

BUILDING, TIMBER, ROADS – Contd

CHEMICALS, PLASTICS

DRAPERY AND STORES

ELECTRICALS

ENGINEERING

ENGINEERING—Contd

FOOD, GROCERIES, ETC

HOTELS AND CATERERS

INDUSTRIALS (Miscel.)

INDUSTRIALS (Miscel.)—Contd

INDUSTRIALS (Miscel.) – Contd.

INSURANCES

LEISURE

صلكدا من الأصل

LONDON SHARE SERVICE

LEISURE—Contd

MOTORS, AIRCRAFT TRADES

Commercial Vehicles

Components

Garages and Distributors

NEWSPAPERS, PUBLISHERS

PAPER, PRINTING, ADVERTISING

PAPER, PRINTING, ADVERTISING — Contd

PROPERTY

SHIPPING

SHOES AND LEATHER

SOUTH AFRICANS

TEXTILES

TEXTILES—Contd

TOBACCOS

TRUSTS, FINANCE, LAND

Investment Trusts

TRUSTS, FINANCE, LAND—Contd

Finance, Land, etc

OIL AND GAS

OIL AND GAS—Contd

OVERSEAS TRADERS

PLANTATIONS

Rubbers, Palm Oil

Teas

MINES

Central Rand

Eastern Rand

Far West Rand

O.F.S.

Diamond and Platinum

Central African

Finance

Australians

MINES—Contd

Tins

Miscellaneous

THIRD MARKET

1.72	Scott Pickford 10p	24½	3.1	16.9	–	–	5062
7.15	Seacon Hldgs.	103	–	–	–	–	3968
1.43	Sonic Tape 2½p	12½	n–	–	–	–	–
5.80	Staks Hldgs. 5p	21	–	–	–	–	4625
4.28	Swanyard Studios 1p	3	–	–	–	–	4666
23.6	Takare	270	b1.0	0.5	–	–	4647
14.9	Theme Holdings	66	41.1	2.2	25.4	June Dec	4306
3.36	Tomorrows Leisure 20p	30	–	–	–	–	4298
11.9	Tullow Oil 10p	19	–	–	–	–	4886
4.51	UPL Group 10p	113	L2.41	2.9	23.5	–	4362
7.22	Unit Group	178	5.0	3.7	4.7	Jan July	4357
7.60	Video Tape Rec 5p.	110	L2.3	2.8	9.5	–	4591

NOTES

Stock Exchange dealing classifications are indicated to the right of security names: α Alpha, β Beta, γ Gamma.

Unless otherwise indicated, prices and net dividends are in pence and denominations are 25p. Yields are based on middle prices, are gross, adjusted to ACT of 25 per cent and allow for value of declared distribution and rights.

- ● "Tap Stock"
- † Interim since increased or resumed
- ‡ Interim since reduced, passed or deferred
- ‡‡ Tax-free to non-residents on application
- ♥ Not officially UK listed; dealings permitted under rule 535(4)(a)
- ♣ USM; not listed on Stock Exchange and company not subjected to same degree of regulation as listed securities.
- ‡‡ Dealt in under Rule 535(3).
- ¶ Price at time of suspension
- ¶ Indicated dividend after pending scrip and/or rights issue.
- ♦ Merger bid or reorganisation in progress
- ♣ Not comparable
- ♠ Same interim; reduced final and/or reduced earnings indicated
- § Forecast dividend.
- ‡ Cover allows for conversion of shares not now ranking for dividends or ranking only for restricted dividend.
- ☆ Cover does not allow for shares which may also rank for dividend at a future date.
- ‖ No par value

B.Fr. Belgian Francs. Fr. French Francs §§ Yield based on assumption Treasury Bill Rate stays unchanged until maturity of stock. a Annualised dividend. b Figures based on prospectus or other offer estimate. c Cents. d Dividend rate paid or payable on part of capital. e Redemption yield. f Flat yield. g Assumed dividend and yield. h Assumed dividend and yield after scrip issue. j Payment from capital sources. k Kenya. m Interim higher than previous total. n Rights issue pending s Dividend and yield exclude a special payment. t Indicated dividend. u Forecast, or estimated annualised dividend rate. v Subject to local tax. y Dividend and yield based on merger terms. z Dividend and yield include a special payment. A Net dividend and yield. B Preference dividend passed or deferred. C Canadian. E Minimum tender price. F Dividend and yield based on prospectus or other official estimates for 1988-89. G Assumed dividend and yield after pending scrip and/or rights issue. H Dividend and yield based on prospectus or other official estimates for 1989. K Dividend and yield based on prospectus or other official estimates for 1987-88. L Estimated annualised dividend. M Dividend and yield based on prospectus or other official estimates for 1988. N Dividend and yield based on prospectus or other official estimates for 1987. P Figures based on prospectus or other official estimates for 1987. Q Gross. R Forecast annualised dividend. T Figures assumed. W Pro forma figures. Z Dividend total to date.

Abbreviations: xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xd ex capital distribution.

REGIONAL & IRISH STOCKS

The following is a selection of Regional and Irish stocks, the latter being quoted in Irish currency.

IRISH

TRADITIONAL OPTIONS

3-month call rates

Industrials	p
Allied-Lyons	35
Amstrad	16
BAT	36
BOC Grp.	36
BSR	8
BTR	22
Barclays	35
Beecham	42
Blue Circle	38
Boots	19
Bowaters	35
Brit Aerospace	35
Brit. Telecom	22
Burton Ord.	21
Cadburys	32
Charter Cons	38
Comm Union	34
Courtaulds	34
FKI Babcock	12
FNFC	23
Gen Accident	85
GEC	13
Glaxo	85
Grand Met	45
GUS 'A'	95
Guardian	85
GKN	28
Hanson	12
Hawker Sidd.	48
ICI	72
Jaguar	26
Ladbroke	38
Legal & Gen.	25
Lex Service	33
Lloyds Bank	26
Lucas Inds	50
Marks & Spencer	17
Midland Bk	37
Morgan Grenfell	30
NEI	18
Nat West Bk	52
P & O Dfd	52
Plessey	16
Polly Peck	30
Racal Elect	32
RHM	30
Rank Org Ord	64
Reed Intnl	36
STC	24
Sears	11
TI	28
TSB	9
Tesco	14
Thorn EMI	60
Trust Houses	21
T&N	17
Unilever	42
Vickers	14
Wellcome	45

Property

Brit Land	38
Land Securities	52
MEPC	52
Peachey	50

Oils

Brit. Gas	15
Brit Petroleum	24
Burmah Oil	50
Charterhall	3
LASMO	40
Premier	7½
Shell	95
Ultramar	26

Mines

Cons Gold	95
Lonrho	20
RTZ	35

A selection of Options traded is given on the London Stock Exchange Report Page

This service is available to every Company dealt in on Stock Exchanges throughout the United Kingdom for a fee of £940 per annum for each security.

CURRENCIES, MONEY AND CAPITAL MARKETS

FOREIGN EXCHANGES

Little in common apart from fast UK and Japanese growth

STERLING AND the yen have fallen out of favour recently, as the D-Mark has recovered from a bout of nervous weakness, and the dollar maintains a firm undertone.

The UK and Japan have two of the fastest growth rates among the major industrialised nations, but there the similarity tends to end.

Growth in UK Gross Domestic Product is likely to be around 2.5 p.c. in the present financial year. Recent forecasts suggest Japan's annual growth rate is about 5 p.c.

But Japan has so far managed to grow strongly, without provoking inflation. The Japanese inflation rate is about 0.5 p.c., whereas UK inflation is moving up towards 5 p.c., and is generally expected to head towards 6 p.c.

Japan is also heading for another substantial balance of payments surplus, whereas the UK could be running an annual deficit in the region of £12bn ($20bn).

Japan's main problem, as far as its currency is concerned, is that the economy is so successful, without sparking the fire of inflation, that there is no reason to increase interest rates.

The general rise in rates elsewhere, including the US and Europe, has been accompanied by an upward trend in Tokyo, but has left Japanese rates relatively unattractive.

Britain, on the other hand, has attractively high interest rates, but only because the economic horse is threatening to bolt off at an alarming pace, and needs to be weighed down, with double digit base rates.

The Bank of England has already provided support for sterling on the foreign exchanges, but the market was reassured this has not yet been on a large scale when it was announced on Friday that Britain's official reserves rose by an underlying $827m in August.

If the Bank of England has not been in the market on a substantial scale, it is doubtful whether the Bank of Japan has intervened at all.

The dollar finished the week at around the Y136 level, where the Japanese central bank seems content to take a relaxed view.

If the dollar rises to Y138 this week there is every chance the Bank of Japan will show its hand, according to dealers, but the dollar will probably go above Y140 before there is a rise in the Japanese discount rate.

The problem is that the economic situation does not yet warrant higher Japanese interest rates, and the Bank of Japan is also worried about possible criticism over precipitating a fall in share prices, when world equity markets are going through another nervous phase.

In Britain the picture is entirely different. Worries about excessive bank lending - increasing the upward pressure on inflation - and a sharp deterioration of the trade balance, has killed the bullish tone seen in sterling around mid-Summer.

Economists are now dusting off their charts, and looking for downward resistance points for the pound.

The level of DM3.1450 was soon shrugged aside last week, and resistance at DM3.1250 did not last very long. The market is now looking for DM3.0800 as a possible level to hold the thin red line.

The only bright spot was that sterling bounced off a chart point of $1.6650 against the dollar on Friday, recovering to $1.6800. But the pound's exchange rate index fell 0.3 to 75.2, taking it nearer to an important resistance level of 74.8, where the market is worried there could be fears of a full blown sterling crisis.

£ IN NEW YORK

Sept.2	Close	Previous Close
£ Spot	1.6845-1.6855	1.6685-1.6695
1 month	0.52-0.51pm	0.51-0.50pm
3 months	1.65-1.63pm	1.53-1.52pm
12 months	4.70-4.65pm	4.41-4.38pm

Forward premiums and discounts apply to the US dollar

STERLING INDEX

	Sept.2	Previous
8.30 am	75.3	75.8
9.00 am	75.3	75.8
10.00 am	75.3	75.8
11.00 am	75.3	75.7
Noon	75.2	75.8
1.00 pm	75.3	75.8
2.00 pm	75.2	75.8
3.00 pm	75.1	75.8
4.00 pm	75.2	75.5

CURRENCY RATES

Sept.2	Bank rate %	Special* Drawing Rights	European Currency Unit
Sterling	-	0.766389	0.662279
U.S Dollar	6.50	1.28692	1.10534
Canadian $	8.75	1.59166	1.36753
Austrian Sch.	4	17.0092	14.5740
Belgian Franc	7	50.7175	43.4400
[illegible]	[illegible]	[illegible]	[illegible]

*All SDR rates are for Sept.1

CURRENCY MOVEMENTS

Sept.2	Bank of England Index	Morgan Guaranty Changes %
[illegible]	[illegible]	[illegible]

Morgan Guaranty changes: average 1980-1982=100. Bank of England Index (Base Average 1975=100) *Rates are for Sept.1

OTHER CURRENCIES

Sept.2	£	$
[illegible]	[illegible]	[illegible]

*Selling rate

FORWARD RATES AGAINST STERLING

	Spot	1 mth	3 mths	6 mths	12 mths
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

EMS EUROPEAN CURRENCY UNIT RATES

	Ecu central rates	Currency amounts against Ecu Sept.2	% change from central rate	% change adjusted for divergence	Divergence limit %
Belgian Franc	42.4582	43.4400	+2.31	+0.98	±1.5344
Danish Krone	7.85212	7.96566	+1.45	+0.12	±1.5404
German D-Mark	2.05853	2.07142	+0.63	-0.70	±1.0981
French Franc	6.90403	7.04182	+2.00	+0.67	±1.3674
Dutch Guilder	2.31943	2.33924	+0.85	-0.48	±1.5012
Irish Punt	0.768411	0.774430	+0.78	-0.55	±1.6684
Italian Lira	1483.58	1544.72	+4.12	+3.34	±4.0752

Changes are for Ecu, therefore positive change denotes a weak currency. Adjustment calculated by Financial Times.

POUND SPOT- FORWARD AGAINST THE POUND

Sept.2	Day's spread	Close	One month	% p.a.	Three months	% p.a.
US	1.6650 - 1.6840	1.6830 - 1.6840	0.54-0.51cpm	3.74	1.62-1.57pm	3.79
Canada	2.0615 - 2.0815	2.0805 - 2.0815	0.42-0.33cpm	2.16	1.15-1.04pm	2.10
Netherlands	3.51¼ - 3.54	3.53 - 3.54	2-1¾cpm	6.58	6-5¾pm	6.65
Belgium	65.60 - 65.85	65.75 - 65.85	31-26cpm	5.20	85-77pm	4.92
Denmark	11.97¾ - 12.07	12.06 - 12.07	4¾-3¼orepm	3.83	12⅞-11½pm	4.00
Ireland	1.1625 - 1.1710	1.1665 - 1.1675	0.49-0.43pm	4.73	1.44-1.34pm	4.76
W. Germany	3.11¼ - 3.13¼	3.12¼ - 3.13¼	1⅞-1⅝pfpm	6.71	5⅝-5⅜pm	7.03
Portugal	256.20 - 258.90	257.90 - 258.90	par-42cdis	-0.98	2-95dis	-0.75
Spain	206.95 - 208.50	207.60 - 207.90	40-26cpm	1.91	104-87pm	1.84
Italy	2318 - 2336¼	2331½ - 2332½	3.00-2.50liredis	1.42	8.30-4.20pm	1.07
Norway	11.65½ - 11.64¼	11.63¾ - 11.64¾	¼-1oredis	-0.58	2¼-2⅞dis	-0.88
France	10.57¾ - 10.64¼	10.62¾ - 10.63¾	4¼-3¼cpm	4.44	11¼-11pm	4.28
Sweden	10.79½ - 10.88½	10.87½ - 10.88½	1¾-1⅞orepm	1.72	5½-4¾pm	1.88
Japan	228¼ - 229½	228½ - 229½	1¼-1¼ypm	6.55	4¼-4pm	7.10
Austria	21.90 - 22.05	22.02 - 22.05	13¾-12¼gropm	6.94	38¼-35¼pm	6.69
Switzerland	2.62½ - 2.64¼	2.62¾ - 2.63¾	1⅞-1½cpm	7.69	5⅝-5¼pm	8.17

Belgian rate is convertible francs. Financial franc 66.70-66.80. Six-month forward dollar 2.90-2.85cpm 12 months 4.90-4.80cpm

DOLLAR SPOT- FORWARD AGAINST THE DOLLAR

Sept.2	Day's spread	Close	One month	% p.a.	Three months	% p.a.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

† UK and Ireland are quoted in US currency. Forward premiums and discounts apply to the US dollar and not to the individual currency. Belgian rate is for convertible francs.

EURO-CURRENCY INTEREST RATES

Sept.2	Short term	7 Days notice	One Month	Three Months	Six Months	One Year
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Long term Eurodollars: two years 8¾-8⅞ per cent; three years 8⅞-9 per cent; four years 8⅞-9⅛ per cent; five years 8⅞-9⅛ per cent nominal. Short term rates are call for US Dollars and Japanese Yen; others, two days' notice.

EXCHANGE CROSS RATES

Sept.2	£	$	DM	Yen	F Fr.	S Fr.	H Fl.	Lira	C $	B Fr.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Yen per 1,000: French Fr. per 10: Lira per 1,000: Belgian Fr. per 100.

PHILADELPHIA SE £/$ OPTIONS

£12,500 (cents per £1)

[illegible]

LONDON SE £/$ OPTIONS

£12,500 (cents per £1)

[illegible]

LIFFE LONG GILT FUTURES OPTIONS

[illegible]

LIFFE US TREASURY BOND FUTURES OPTIONS

[illegible]

LIFFE FT-SE INDEX FUTURES OPTIONS

[illegible]

LIFFE £/$ OPTIONS

£25,000 (cents per £1)

[illegible]

LIFFE EURODOLLAR OPTIONS

$1m points of 100%

[illegible]

LIFFE SHORT STERLING

[illegible]

LONDON (LIFFE)

[illegible]

CURRENCY FUTURES

[illegible]

CHICAGO

[illegible]

SWISS FRANC (IMM) SFr 125,000 $ per SFr

	Close	High	Low	Prev.
Sep	0.6436	0.6440	0.6342	0.6336
Dec	0.6511	0.6518	0.6418	0.6411
Mar	0.6576	0.6570	0.6550	0.6479
Jun	0.6662	0.6625	-	0.6565

STANDARD & POORS 500 INDEX $500 times index

	Close	High	Low	Prev.
Sep	265.60	266.00	262.00	258.80
Dec	268.05	268.50	264.50	261.25
Mar	270.60	271.00	267.10	263.85
Jun	272.50	273.50	272.00	265.60

BASE LENDING RATES

	%		%		%
ABN Bank	12	City Merchants Bank	12	NatWestminster	12
Adam & Company	12	Clydesdale Bank	12	Northern Bank Ltd	12
AAB - Allied Arab Bk	12	Comm. Bk N. East	12	Norwich Gen. Trust	12
Allied Irish Bank	12	Co-operative Bank	*12	PRIVATbanken Limited	12
● Henry Ansbacher	12	Coutts & Co	12	Provincial Bank PLC	13
ANZ Banking Group	12	Cyprus Popular Bk	12	R. Raphael & Sons	12
Associates Cap Corp	10	Dunbar Bank PLC	12	Roxburghe G'rantee	11½
Authority Bank	12	Duncan Lawrie	12	Royal Bk of Scotland	12
● B & C Merchant Bank	12	Equatorial Bank plc	12	Royal Trust Bank	12
Banco de Bilbao	12	Exeter Trust Ltd	12½	● Smith & Williamson Secs.	12
Bank Hapoalim	12	Financial & Gen. Bank	12	Standard Chartered	12
Bank Leumi (UK)	11	First National Bank Plc.	13	TSB	12
Bank Credit & Comm	12	● Robert Fleming & Co.	12	UDT Mortgage Exp	§12.75
Bank of Cyprus	12	Robert Fraser & Ptnrs.	12½	United Bk of Kuwait	12
Bank of Ireland	12	Girobank	12	United Mizrahi Bank	12
Bank of India	12	● Guinness Mahon	12	Unity Trust Bank Plc	12
Bank of Scotland	12	HFC Bank plc	12	Western Trust	12
Banque Belge Ltd	12	● Hambros Bank	12	Westpac Bank Corp.	12
Barclays Bank	12	Heritable & Gen Inv Bk	12	Whiteaway Laidlaw	12½
Benchmark Bank PLC	12	● Hill Samuel	§12	Yorkshire Bank	12
Berliner Bank AG	12	C. Hoare & Co.	12		
Brit Bk of Mid East	12	Hongkong & Shangh	12		
● Brown Shipley	12	● Leopold Joseph & Sons	12		
Business Mtge Tst	12½	Lloyds Bank	12		
CL Bank Nederland	12	McDonnell Douglas Bk	12.5		
Central Capital	12	Meghraj Bank Ltd	12		
● Charterhouse Bank	12	Midland Bank	12		
Citibank NA	12	Mount Banking Corp.	12		
		Nat. Bk. of Kuwait	12		

● Members of British Merchant Banking & Securities Houses Association. * 7 day deposits 4.38% Sunwise 7.16%. Top Tier-£10,000 + instant access 9.0% ‡ Mortgage base rate. § Demand deposit 7%. Mortgage 11.375% - 11.75%

LONDON RECENT ISSUES

EQUITIES

[illegible]

FIXED INTEREST STOCKS

[illegible]

RIGHTS OFFERS

[illegible]

EUROPEAN OPTIONS EXCHANGE

[illegible]

TOTAL VOLUME IN CONTRACTS : 25,250

A=Ask B=Bid C=Call P=Put

MONEY MARKETS

A slight easing in rate pressure

THREE-MONTH sterling interbank hovered around 12⅛ p.c. in London at the end of last week, pointing to yet another rise in UK bank base rates.

Lack of economic news is likely to mean no strong build up of pressure this week however. Data likely to produce a change in base rates are not due until money supply and bank lending on September 20 and the trade figures on September 27.

US employment figures for August, released on Friday, helped to ease the pressure on London rates by suggesting there is no immediate need for the US Federal Reserve to tighten its monetary stance.

Unemployment rose to 5.6 p.c., from 5.4 p.c. in July, while the rise in non-farm payrolls was 219,000, against expectations of around 230,000. The July increase was revised down to 200,000 from 283,000.

There was also relief for the credit markets in the fact that the rise in August payrolls was entirely in the service sector.

UK clearing bank base lending rate 12 per cent from August 25 & 26

The industrial sector showed a loss of 8,000 jobs, helping to calm fears about overheating in the economy.

Upward pressure on West German interest rates also appears to have eased, as a result of the recovery of the D-Mark.

This has tended to turn attention towards Japanese rates, as the yen has suffered selling pressure.

The Japanese Finance Minister, and the Governor of the Bank of Japan, indicated last week that there was no need to increase interest rates, but to some extent the rise has already happened.

The Japanese discount rate is only 2.5 p.c., but in recent months money market rates have climbed to around 5 p.c.

FT LONDON INTERBANK FIXING

(11.00 a.m. Sept.2) 3 months US dollars		6 months US Dollars	
bid 8⅝	offer 8¾	bid 8⅞	offer 9

The fixing rates are the arithmetic means rounded to the nearest one-sixteenth, of the bid and offered rates for $10m quoted by the market to five reference banks at 11.00 a.m. each working day. The banks are National Westminster Bank, Bank of Tokyo, Deutsche Bank, Banque Nationale de Paris and Morgan Guaranty Trust.

BANK OF ENGLAND TREASURY BILL TENDER

	Sept.2	Aug.26		Sept.2	Aug.26
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

WEEKLY CHANGE IN WORLD INTEREST RATES

	Sept.2	change		Sept.2	change
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MONEY RATES

NEW YORK (4pm)

		Treasury Bills and Bonds			
Prime rate	10	One month	6.77	Three year	8.59
Broker loan rate	9¾-¼	Two month	7.21	Four year	8.66
Fed.funds	8⅛	Three month	7.43	Five year	8.74
Fed.funds at intervention	8⅛	Six month	7.80	Seven year	8.87
		One year	8.01	10-year	9.01
		Two year	8.47	30-year	9.06

Sept.2	Overnight	One Month	Two Months	Three Months	Six Months	Lombard Intervention
Frankfurt	4.70-4.80	4.60-4.80	4.80-5.00	4.90-5.10	5.30-5.50	5.00
Paris	7⅛-7½	7⅝-7¾	7¾-7⅞	7⅞-8⅛	8⅛-8⅜	6.75
Zurich	1⅝-1⅞	3½-3¾	-	3¾-4	-	-
Amsterdam	5¼-5½	5⅜-5⅝	-	5½-5¾	-	-
Tokyo	3.96875	4.28125	-	4.15625	-	-
Milan	10-10½	10⅞-11⅛	-	11⅛-11⅝	-	-
Brussels	-	7⅛-7⅜	-	7⅛-7½	-	-
Dublin	7¼-7½	7⅝-7⅞	7½-7¾	7⅞-8⅛	8⅛-8⅜	-

LONDON MONEY RATES

Sept.2	Overnight	7 days notice	One Month	Three Months	Six Months	One Year
Interbank Offer	11½	11¼	12⅛	12⅜	12⅜	12½
Interbank Bid	2	10½	11¾	12¼	12¼	12⅜
Sterling CDs.	-	-	12	12⅛	12⅛	12⅛
Local Authority Deps.	10¾	11½	12	12⅛	12⅛	12⅛
Local Authority Bonds	-	-	11	11⅜	11¾	11¾
Discount Mkt Deps.	11	11	11⅝	11⅝	-	-
Company Deposits	-	-	12⅛	12½	12⅜	12½
Finance House Deposits	-	-	12¼	12⅜	12⅜	12⅜
Treasury Bills (Buy)	-	-	11⅜	11⅞	-	-
Bank Bills (Buy)	-	-	11⅞	12	11⅞	-
Fine Trade Bills (Buy)	-	-	12⅛	12⅜	12½	-
Dollar CDs	-	-	8.40-8.35	8.55-8.50	8.90-8.85	9.15-9.10
SDR Linked Dep Offer	-	-	7⅞	7⅞	7⅞	7⅞
SDR Linked Dep Bid	-	-	7⅜	7⅜	7⅜	7⅝
ECU Linked Dep Offer	-	-	7½	7⅝	8⅛	8⅜
ECU Linked Dep Bid	-	-	7¼	7⅜	7⅞	8⅛

Treasury Bills (sell): one-month 11½ per cent; three months 11⅝ per cent; Bank Bills (sell): one-month 11⅞ per cent; three months 11⅞ per cent; Treasury Bills; Average tender rate of discount 11.6355 p.c. ECGD Fixed Rate Sterling Export Finance. Make up day Aug.31, 1988. Agreed rates for period September 26, 1988 to October 25, 1988, Scheme I: 12.27 p.c., Schemes II & III: 12.72 p.c. Reference rate for period July 30, 1988 to August 31, 1988, Scheme IV&V: 11.364 p.c. Local Authority and Finance Houses seven days' notice, others seven days' fixed. Finance Houses Base Rate 11 from September 1, 1988: Bank Deposit Rates for sums at seven days notice 3.75 per cent. Certificates of Tax Deposit (Series 6); Deposit £100,000 and over held under one month 7½ per cent; one-three months 9 per cent; three-six months 9 per cent; six-nine months 9½ per cent; nine-twelve months 9½ per cent; Under £100,000 7 per cent from July 5, 1988. Deposits withdrawn for cash 5 per cent.

FT-ACTUARIES WORLD INDICES

Jointly compiled by the Financial Times, Goldman, Sachs & Co., and Wood Mackenzie & Co. Ltd., in conjunction with the Institute of Actuaries and the Faculty of Actuaries

NATIONAL AND REGIONAL MARKETS	FRIDAY SEPTEMBER 2 1988					THURSDAY SEPTEMBER 1 1988			DOLLAR INDEX		
Figures in parentheses show number of stocks per grouping	US Dollar Index	Day's Change %	Pound Sterling Index	Local Currency Index	Gross Div. Yield	US Dollar Index	Pound Sterling Index	Local Currency Index	1988 High	1988 Low	Year ago (approx)
Australia (86)	139.68	+0.3	123.01	117.11	3.96	139.33	123.43	116.25	152.31	91.16	167.71
Austria (16)	86.51	+0.4	76.18	83.89	2.49	86.16	76.33	84.10	98.18	83.72	98.23
Belgium (63)	111.46	+0.0	98.16	108.99	4.63	111.44	98.72	109.51	139.89	99.14	133.73
Canada (126)	117.93	+0.8	103.85	105.67	3.24	117.03	103.68	104.82	128.91	107.06	136.42
Denmark (39)	120.41	-0.2	106.04	117.38	2.53	120.62	106.86	118.16	132.72	111.42	122.88
Finland (26)	117.05	+0.3	103.08	109.02	1.50	116.67	103.36	109.21	139.53	106.78	-
France (128)	90.26	+1.3	79.49	89.41	3.63	89.13	78.97	89.06	99.62	72.77	117.22
West Germany (100)	74.07	+0.7	65.23	71.58	2.56	73.53	65.15	71.64	80.79	67.78	102.19
Hong Kong (46)	100.14	+0.9	88.19	100.36	4.49	99.26	87.94	99.47	111.86	84.90	146.85
Ireland (18)	127.07	-0.1	111.90	124.64	3.69	127.17	112.67	125.49	144.25	104.60	145.33
Italy (100)	69.84	-0.7	61.50	73.53	2.75	70.31	62.29	73.31	81.74	62.99	87.63
Japan (456)	153.13	+0.4	134.86	131.60	0.55	152.47	135.08	131.46	177.27	133.61	149.78
Malaysia (36)	135.94	+1.8	119.72	139.89	2.86	133.54	118.31	137.89	154.17	107.83	171.36
Mexico (13)	152.09	+0.0	133.94	380.22	1.04	152.09	134.74	380.22	180.07	90.07	372.78
Netherland (38)	100.53	+0.8	88.53	96.35	4.77	99.71	88.33	96.34	110.66	95.23	126.07
New Zealand (20)	70.75	+0.1	62.31	62.36	6.01	70.70	62.63	62.41	84.05	64.42	130.95
Norway (25)	110.08	+0.0	96.94	103.32	2.90	110.10	97.54	103.60	132.23	98.55	176.95
Singapore (26)	120.31	+1.5	105.95	113.43	2.33	118.57	105.05	111.69	135.89	97.99	166.94
South Africa (60)	110.08	+0.1	96.94	86.73	4.98	110.00	97.45	86.65	139.07	108.73	186.12
Spain (43)	139.34	+0.2	122.71	131.06	4.03	139.10	123.23	131.15	164.47	130.73	156.74
Sweden (35)	112.11	+0.3	98.73	107.26	2.66	111.81	99.05	107.26	125.50	96.92	131.07
Switzerland (55)	74.80	+0.9	65.87	72.68	2.13	74.13	65.67	72.68	86.75	74.13	110.00
United Kingdom (323)	122.66	+1.6	108.02	108.02	4.61	120.66	106.89	106.89	141.18	120.66	154.18
USA (580)	108.08	+2.3	95.18	108.08	3.68	105.69	93.63	105.69	112.47	99.19	129.42
Europe (1000)	99.97	+1.0	88.04	93.11	3.91	98.99	87.70	92.84	110.82	97.01	127.63
Pacific Basin (670)	150.46	+0.4	132.50	129.72	0.76	149.80	132.71	129.53	172.26	130.81	150.31
Euro-Pacific (1679)	130.28	+0.6	114.73	115.12	1.74	129.49	114.72	114.90	147.53	120.36	141.31
North America (706)	108.59	+2.2	95.63	107.95	3.66	106.29	94.16	105.66	113.29	99.78	129.79
Europe Ex. UK (686)	85.86	+0.5	75.61	83.98	3.23	85.44	75.69	84.21	92.99	80.27	111.14
Pacific Ex. Japan (214)	118.27	+0.5	104.16	106.23	4.15	117.65	104.23	105.40	128.27	87.51	156.84
World Ex. US (1878)	129.66	+0.6	114.19	114.64	1.81	128.89	114.19	114.40	146.49	120.26	141.76
World Ex. UK (2135)	121.11	+1.1	106.66	112.80	2.21	119.79	106.12	111.82	131.77	111.77	135.25
World Ex. So. Af. (2398)	121.30	+1.2	106.82	112.51	2.42	119.91	106.23	111.51	132.39	113.26	136.62
World Ex. Japan (2002)	105.96	+1.7	93.32	102.62	3.77	104.24	92.35	101.16	112.43	100.00	130.80
The World Index (2458)	121.22	+1.1	106.76	112.34	2.44	119.85	106.18	111.35	132.38	113.37	136.93

Base values: Dec 31, 1986 = 100; Finland: Dec 31, 1987 = 115.037 (US $ Index), 90.791 (Pound Sterling) and 94.94 (Local). Copyright, The Financial Times, Goldman, Sachs & Co., Wood Mackenzie & Co. Ltd. 1987. Mexican market closed on September 2. CONSTITUENT CHANGES: Deletions; Homes (Australia), Chieftain Dev. and Dome Petroleum (both Canada), St Gobain Certs (France), Industrie Meca (Ord. & Risp.) (Italy) and Atlantic Computers (UK).

WORLD STOCK MARKETS

AUSTRIA

[illegible]

BELGIUM/LUXEMBOURG

[illegible]

DENMARK

[illegible]

FINLAND

[illegible]

FRANCE

[illegible]

FRANCE (continued)

[illegible]

GERMANY

[illegible]

ITALY

[illegible]

NETHERLANDS

[illegible]

NORWAY

[illegible]

SPAIN

[illegible]

SWEDEN

[illegible]

SWITZERLAND

[illegible]

SOUTH AFRICA

[illegible]

JAPAN

[illegible]

AUSTRALIA

[illegible]

AUSTRALIA (continued)

[illegible]

HONG KONG

[illegible]

SINGAPORE

[illegible]

NOTES — Prices on this page are as quoted on the individual exchanges and are last traded prices. (u) unavailable. § Dealings suspended. xd Ex dividend. xc Ex scrip issue. xr Ex rights. xa Ex all.

INDICES

NEW YORK — DOW JONES

	Sep 2	Sep 1	Aug 31	Aug 30	1988 High	1988 Low	Since compilation High	Since compilation Low
♦Industrials	2054.59	2002.31	2031.65	2038.23	2158.61 (5/7)	1879.14 (20/1)	2722.42 (25/8/87)	41.22 (2/7/32)
Home Bonds	88.30	88.03	87.99	88.03	91.25 (3/3)	86.12 (4/1)	—	—
Transport	857.23	839.01	846.62	848.42	908.45 (5/7)	737.57 (21/1)	1101.16 (14/8/87)	12.32 (8/7/32)
Utilities	180.66	177.34	178.70	178.64	190.02 (29/1)	167.26 (20/4)	227.83 (22/1/87)	10.50 (8/4/32)

♦Day's High 2064.72 (2027.56) Low 2022.40 (1988.44)

STANDARD AND POOR'S	Sep 2	Sep 1	Aug 31	Aug 30	1988 High	1988 Low	Since compilation High	Since compilation Low
Composite ‡	264.48	258.35	261.52	262.51	275.66 (22/6)	242.63 (20/1)	336.77 (25/8/87)	4.40 (1/6/32)
Industrials	303.35	296.35	300.05	301.32	318.54 (22/6)	277.86 (20/1)	393.17 (25/8/87)	3.62 (21/6/32)
Financials	25.26	24.52	24.88	25.00	25.54 (3/8)	21.51 (8/1)	32.43 (25/8/87)	8.64 (1/10/74)
NYSE Composite	149.66	146.68	148.29	148.66	155.35 (22/6)	136.72 (20/1)	187.99 (25/8/87)	4.46 (25/4/42)
Amex Mkt. Value	295.62	293.18	294.80	294.91	309.33 (10/6)	262.76 (12/1)	365.01 (13/8/87)	29.31 (9/12/72)
NASDAQ OTC Comp	376.51	372.96	376.55	376.49	394.77 (18/7)	331.97 (12/1)	455.26 (26/8/87)	54.87 (31/10/72)

	Aug 19	Aug 12	Aug 5	year ago (approx.)
Dow Industrial Div. Yield	3.79	3.73	3.51	2.54

	Aug 24	Aug 17	Aug 10	year ago (approx.)
S & P Industrial div. yield	3.30	3.29	3.26	2.40
S & P P/E ratio	13.57	13.57	13.65	23.20

TRADING ACTIVITY † Volume

Millions	Sep 2	Sep 1	Aug 31
New York	159.840	144.090	130.480
Amex	8.545	7.254	16.800
OTC	96.394	106.382	117.135

NEW YORK	Sep 2	Sep 1	Aug 31
Issues Traded	1,908	1,921	1,922
Rises	1,192	359	679
Falls	289	1,075	706
Unchanged	427	487	537
New Highs	10	9	10
New Lows	6	21	12

CANADA

TORONTO	Sep 2	Sep 1	Aug 31	Aug 30	1988 High	1988 Low
Metals & Minerals	2863.7	2824.5	2871.5	2897.6	3226.5 (5/7)	2238.7 (8/2)
Composite	3290.0	3263.2	3285.8	3274.1	3465.4 (5/7)	2977.9 (8/2)
MONTREAL Portfolio	1643.72	1622.33	1636.97	1631.94	1723.71 (5/7)	1385.06 (27/1)

NEW YORK ACTIVE STOCKS

Friday	Stocks traded	Closing price	Change on day
Occidental Pet.	10,000m	26⅞	+ ⅜
NCNB	3,974,800	28¼	+ 1⅝
Exxon	2,121,900	46⅞	+ 1
Gould	1,832,700	22½	+ ¼
Kan G&E (xd)	1,748,800	18⅞	¼
General Electric	1,655,900	40⅞	+ 1
IBM	1,564,600	114	+ 3¼
American Express	1,459,900	29⅛	+ 1¼
Southern	1,459,400	21	—
Citicorp	1,410,800	24⅝	+ ⅞

Base values of all indices are 100 except NYSE All Common — 50; Standard and Poor's — 10; and Toronto Composite and Metals 1000. Toronto indices based 1975 and Montreal Portfolio 4/1/83. † Excluding bonds. ‡ 400 Industrials plus 40 utilities. 40 Financials and 20 transports. (c) Closed. (u) Unavailable.

CANADA

TORONTO

Closing prices September 2

[illegible]

MONTREAL

Closing prices September 2

[illegible]

OVER-THE-COUNTER

Nasdaq national market, 2pm prices September 2

Continued from page 33

[illegible]

TOKYO - Most Active Stocks

Thursday 1 September 1988

	Stocks Traded	Closing Prices	Change on day
Nippon Steel	37.72m	630	-28
Kawasaki Steel	28.20m	667	-22
Mitsubishi Oil	18.63m	1,190	+50
Nippon Kokan	18.40m	595	-31
Toshiba	16.55m	1,010	-30
Mitsubishi Heavy	13.63m	820	-25
Koa Fire and Marine	10.46m	1,050	+76
Nisshin Steel	9.48m	1,050	-20
Kobe Steel	9.02mm	485	-13
Hitachi	8.57m	1,640	-30

INDICES

	Sept 2	Sept 1	Aug 31	Aug 30	1988 High	1988 Low
AUSTRALIA						
All Ordinaries (1/1/80)	1546.2	1541.4	1570.5	1580.5	1657.8 (9/8)	1170.7 (10/2)
All Mining (1/1/80)	743.8	746.1	767.3	777.5	847.8 (9/8)	532.4 (10/2)
AUSTRIA						
Credit Aktien (30/12/84)	197.9	198.1	198.8	197.8	199.70 (17/8)	163.98 (11/2)
BELGIUM						
Brussels SE (1/1/84)	(u)	4877.20	4879.2	4867.7	5043.1 (9/3)	3608.35 (4/1)
DENMARK						
Copenhagen SE (3/1/83)	218.21	218.75	218.87	218.53	227.86 (3/8)	180.68 (4/1)
FINLAND						
Unitas General (1975)	719.7	726.4	725.8	718.2	772.1 (8/8)	530.6 (15/1)
FRANCE						
CAC General (31/12/82)	344.8	348.3	347.7	347.6	368.5 (8/7)	251.3 (29/1)
Ind. Tendance (31/12/87)	130.4	130.9	131.8	131.0	137.6 (7/7)	89.7 (29/1)
GERMANY						
FAZ Aktien (31/12/58)	477.96	478.50	484.31	481.95	495.78 (8/7)	396.40 (29/1)
Commerzbank (1/12/53)	1453.0	1454.5	1473.3	1465.8	1510.4 (8/8)	1207.9 (29/1)
DAX (30/12/87)	1157.29	1152.99	1165.36	1165.53	1199.96 (5/7)	931.18 (28/1)
HONG KONG						
Hang Seng Bank (31/7/64)	2449.89	2433.32	2443.80	2439.55	2772.53 (12/7)	2223.56 (8/2)
ITALY						
Banca Com. Ital. (1972)	513.48	520.24	519.65	523.83	545.07 (18/3)	423.91 (9/2)
JAPAN**						
Nikkei (16/5/49)	27116.50	26934.26	27365.95	27511.65	28423.38 (5/8)	21217.04 (4/1)
Tokyo SE New (4/1/68)	2096.22	2093.20	2128.02	2141.49	2253.10 (2/8)	1690.44 (4/1)
NETHERLANDS						
ANP-CBS General (1970)	261.1	262.5	264.2	263.6	284.8 (9/8)	205.7 (4/1)
ANP-CBS Industrial (1970)	221.2	222.6	224.1	224.7	239.3 (9/8)	157.9 (11/1)
NORWAY						
Oslo SE (4/1/83)	374.79	375.54	378.14	371.30	423.64 (21/7)	327.78 (28/1)
SINGAPORE						
Straits Times Ind. (30/12/66)	1049.27	1031.81	1036.59	1020.21	1177.87 (8/8)	833.60 (4/1)
SOUTH AFRICA						
JSE Gold (28/9/78)	1254.0♦	1250.0	1241.0	1246.0	1451.0 (7/7)	1154.0 (4/5)
JSE Industrial (28/9/78)	1628.0♦	1627.0	1621.0	1630.0	1758.0 (20/7)	1387.0 (12/2)
SPAIN						
Madrid SE (30/12/85)	278.02	280.50	282.75	284.36	301.63 (15/6)	225.50 (4/1)
SWEDEN						
Jacobson & P (31/12/56)	2949.3	2952.2	2965.6	2954.0	3112.90 (5/8)	2148.5 (4/1)
SWITZERLAND						
Swiss Bank Ind. (31/12/58)	543.0	544.3	549.9	553.1	559.0 (9/8)	466.6 (13/1)
WORLD						
M.S. Capital Intl. (1/1/70)	(u)	422.7	428.7	433.8	465.2 (15/6)	401.0 (21/1)

**Saturday August 27: Japan Nikkei 27678.91 and TSE 2159.58
♦ Subject to official recalculation

Base values of all indices are 100 except Brussels SE and DAX 1,000 JSE Gold 255.7 JSE Industrials 264.3 and Australia All Ordinary and Mining 500. (c) Closed (u) Unavailable

4pm prices September 2

NEW YORK STOCK EXCHANGE COMPOSITE PRICES

12 Month High	12 Month Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
		– A–A–A –								
27⅞	14	AAR s	.36	1.5	18	257	24⅞	24	24⅛	+ ⅞
10	10	ACM n				587	10	10	10	
12⅛	8⅛	ACMIn n1.40e		13.		775	11⅛	11	11	
12⅛	10⅞	ACMSc n1.26		11.		598	11	10⅞	11	+ ⅛
10⅛	8⅞	ACMSp n.17e		1.9		z266	9⅛	9	9⅛	+ ⅛
28	10½	AGS			20	530	u28⅛	27⅞	28	+ ⅛
7⅝	2⅝	AMCA				84	3⅛	3⅝	3⅛	
8⅛	3⅛	AM Ins				461	5½	5⅛	5⅛	
28⅝	17	AM Int pf	2	9.2		25	21⅞	21⅛	21⅝	+ ⅛
60	28⅛	AMR			9	6555	43⅝	42	43⅛	+ 1⅞
10½	6⅛	ARX			12	23	7½	7⅛	7⅛	
70½	35⅛	ASA	3	8.0		387	38	37½	37⅝	– ⅛
22⅛	9½	AVX	.06e	.3	12	300	18⅞	18⅛	18⅞	+ ⅛
64⅞	40	AbtLab	1.20	2.5	15	5866	47⅞	46½	47⅛	+ 1⅛
27⅛	15⅛	Abitibi g	1			25	16½	16⅛	16½	+ ⅛
18½	8½	AcmeC	.40	4.1		161	9⅛	9⅝	9⅛	+ ⅛
9⅝	6⅝	AcmeE	.32b	4.7	46	24	6⅞	6⅝	6⅞	+ ⅛
20	14⅛	AdaEx	3.05e	20.		185	15⅝	15⅛	15½	+ ⅛
19⅛	8⅞	AdamMl	.24	1.5	16	2	16⅞	16⅞	16⅞	– ⅛
24⅞	7½	AMD				3778	11⅞	10⅞	11⅞	+ ⅝
56⅛	29⅛	AMD pf	3	8.8		12	34⅛	34	34⅛	+ ½
10⅛	4⅝	Adobe				81	7⅛	7⅝	7⅛	– ⅛
20	16⅛	Adob pf	1.84	10.		27	17⅞	17⅝	17⅞	– ⅛
21⅛	17½	Adob pf	2.40	11.		15	21⅛	21⅛	21⅛	+ ⅛
12⅛	5⅞	Advest	.12	1.4	18	46	8⅛	8⅝	8⅝	– ⅛
62⅝	39½	AetnLf	2.76	5.8	7	2301	48	47⅛	48	+ 1⅛
36⅛	20½	AlliPb s	.20	.8		721	26½	26⅛	26½	
22½	13	Ahmans	.88	5.6	10	1357	15⅞	15⅝	15⅞	+ ⅛
4⅝	1⅛	Aileen				280	4½	4⅛	4½	+ ⅛
53⅞	29	AirPro	1.20	2.8	11	2823	43⅛	42	42⅞	+ ⅞
27½	11⅛	AirbFrt	.60	3.6	22	41	17	16⅝	16⅞	+ ⅛
16⅞	6⅛	Airgas			15	59	13⅞	13⅝	13⅝	+ ⅛
20	13½	Airlease	2.30	13.	9	32	18⅛	18	18	
9⅛	7⅞	AlaP dpf	.87	9.7		19	9	8⅞	9	+ ⅛
100	89½	AlaP pf	9.44	10.		z100	93	93	93	+ ⅛

12 Month High	12 Month Low	Stock	Div.	Yld.	P/E	Sls 100s
6⅛	1⅞	BritLnd				13[illegible]
75⅞	44⅞	BritPt	3.18e	6.4	11	887
18⅞	6½	BrtP wt				69[illegible]
33	28⅛	BrP pp wi				73[illegible]
47⅛	35	BritTel	1.94e	5.0	9	42
32½	16½	BHP n	.96e	3.0	13	1[illegible]
25⅛	18⅝	BklyUG	1.72	7.5	10	162
28½	26½	BkUG pf	2.47	8.9		7[illegible]
19⅛	12½	BwnSh	.32	2.2		6[illegible]
43½	26⅝	BrwnGp	1.56	4.7	13	42[illegible]
35⅛	17½	BrwnFr	.48	1.9	18	800[illegible]
30⅛	10⅞	Brnwk	.44	2.2	8	310[illegible]
40⅞	19	BrshWl	.84	2.6	16	10[illegible]
26⅛	17⅞	Buckeye	2.20	11.	7	71
20⅛	16⅛	BunkrH	1.76	10.		1[illegible]
17⅞	12⅛	BKing	1.88	13.	11	11[illegible]
26½	12	BurlnCt			10	2[illegible]
52	40	BrlNth	2.20	3.3	19	x17[illegible]
28⅝	23⅞	BrlRsc	n.15e	.5		x12[illegible]
18⅞	9⅞	Burndy			21	26[illegible]
15⅞	6½	Buslnld			18	4[illegible]
		– C–C–C –				
31⅞	16	CBI In	.60	2.1	41	41[illegible]
54½	37⅞	CBI pf	3.50	7.1		4[illegible]
226⅛	140½	CBS	3	1.9	15	47[illegible]
4⅝	2⅝	CCX				9[illegible]
67⅛	41⅛	CIGNA	2.96	5.9	8	119[illegible]
10⅞	10	CIGHI n				6[illegible]
32½	12	CML n			12	1[illegible]
22⅛	10½	CMS En			6	64[illegible]
66½	47	CNA Fn			8	35[illegible]
12	9⅛	CNAI	1.24	10.	9	3[illegible]
36	16⅛	CNW			8	69[illegible]
32⅛	19	CNW pf	2.12	8.3		17[illegible]
57½	28	CPC	1.44	3.1	14	95[illegible]

Continued on Page 33

حكذا منه الأصل

NYSE COMPOSITE PRICES

Continued from previous Page

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AMEX COMPOSITE PRICES

Closing prices September 2

[illegible]

OVER-THE-COUNTER

Nasdaq national market, 4pm prices September 1

[illegible]

Continued on Page 31

The Business Column

Assessing Japanese companies overseas

If history is any guide, it won't be long before someone produces a book called "Le Défi Japonais". It will argue that Japanese manufacturers' multinational strategies will soon become devastatingly successful, leaving European and US companies far behind unless the author's prescriptions are applied.

Perhaps the book will be as entertaining as Jean-Jacques Servan Schreiber's 1960s tract, Le Défi Americain, which warned of a virtual takeover of Europe by US multinationals. But will it be any more prescient?

Certainly, Japanese manufacturing investment abroad has grown swiftly since the yen began its rapid rise three years ago. But it is still relatively small. The value of Japanese acquisitions in the US to date is still less than those made by Dutch companies.

Like the US presence in Europe 20 years ago, the Japanese presence seems big and threatening, partly because it is new and partly because it is concentrated in highly visible sectors, such as cars and consumer electronics. Also, it seems that most of the main Japanese industrial investments abroad have been peaceful and successful.

But Japanese companies are not perfect. Toyota Motor, the leading automotive group, faced criticism in Kentucky two years ago for not using union labour to build its $800m factory there. Honda has been attacked recently in Ohio for alleged discrimination against blacks. If there have been relatively few disasters, it may be because most Japanese companies' overseas experience is still recent, often of relatively simple assembly operations.

Nissan Motor, the country's second largest motor group, is one of the few that can boast experience abroad which is both long and deep. Nissan set up its first overseas plant in Mexico in 1966. It was an early arrival in Europe as well, purchasing a major stake in Motor Iberica (now Nissan Motor Iberica) in 1980. More recently, it has built large greenfield plants in the UK and the US.

Slow response and bad timing

The track record from these operations is far from impressive. The Mexican subsidiary was set up grudgingly in response to a Mexican government move to ban imports, and the Ginza barons, as Nissan directors were called, were content for a long time to let it produce outdated models and indifferent profits.

Only within the last three years have they recognised Mexicana's potential as a producer of low cost vehicles for other Latin American markets and of low cost parts.

In Spain, Nissan suffered from bad timing. From the moment it bought Massey Ferguson's one third stake in Motor Iberica in January 1980, the company went into loss and did not emerge until 1986. Nissan knew that it would want to carry out a lot of restructuring at Iberica, and it has succeeded in doing so. But it did not expect to have to do this against the background of plunging sales because of a recession in the Spanish truck market. On more than one occasion, it had to decide whether to inject more capital or let the company fall.

In the US, Nissan may have been wrong to begin production at its Tennessee factory in 1983 by making light trucks. Demand was not that strong, so the $760m factory took longer to reach profitability than it might have. It has gradually switched to cars, although its Sentra model is outdated and the company is losing market share in the US.

In the UK, Nissan at last seems to have got it right from the start, with a trouble free start and a popular product. To some critics, Nissan's experience merely shows that the company's managers made a lot of mistakes. But looking back on the experiences of some of the more ambitious US multinationals of the 1960s, it seems that problems often emerge as commitment grows. There is no reason why the Japanese should be exempt from this pattern.

The Nissan experience also shows that the Japanese have at least one quality that will serve them well. It is one that others could easily emulate – patience.

Ian Rodger

THE MONDAY INTERVIEW

Bank surgeon stems the flow

Andrew Baxter and **Bob Vincent** meet A. Robert Abboud, First City's rescuer

There can have been few more interested observers of the recent $4bn rescue of the crippled Dallas-based First RepublicBank than the new chairman and chief executive of yet another long-standing entry on the Lone Star state's banking sick list.

Mr A. Robert Abboud, the leading figure in this year's complex, path-breaking $1.5bn recapitalisation of Houston's First City Bancorporation, is the sort of man who takes a great personal interest in other people's business – especially those banks which do not behave as he thinks they should.

In this case Mr Abboud had a special reason for looking northwards to Dallas, where First Republic's widely-publicised travails threatened temporarily to throw a large spanner into his own plans for the Houston group.

However, *in a long and controversial career in banking* and the energy industry, Mr Abboud has never been afraid to speak out on the rights and wrongs of banking practice, and other issues in which he has been more or less involved.

"You've got to have strong banks to have a strong economy," he says. "They're the spark plugs that make it work. If that's the case banks have to be conservative – they're highly leveraged institutions and they have to stick to lending depositors money."

Mr Abboud's brand of aggressive conservatism clearly recommended him to regulators for the delicate task of nursing First City back to health after one of the largest Federally-assisted rescues on record. But to those with long memories, the choice might, on the face of it, seem odd, given that his previous banking job as chairman and chief executive of First Chicago ended in 1980 with a humiliatingly *public dismissal.*

That was followed only four years later by an almost equally abrupt departure from Occidental Petroleum, where Mr Abboud was seen widely – he says wrongly – as an heir apparent to Dr Armand Hammer.

Mr Abboud emphasises the genuine policy differences behind the dispute with his former employer in Chicago, but for many who worked for him, or found they could not, that is only part of the story.

After all, Mr Abboud, 59, a short thick-set Bostonian of Levantine extraction and pugilistic demeanour, has for the past ten years been followed everywhere he goes by an adjective – abrasive. It's what the "A" in his name stands for, some would say, rather than Alfred.

A workaholic and a stickler for detail, Mr Abboud is not everyone's idea of the ideal boss. Former colleagues have spoken of receiving verbal lashings in language that they would not use on their worst enemy. In short, to use a quintessentially American euphemism, there are question marks over his "people skills."

PERSONAL FILE

1929 Born, Boston, Massachusetts
1951-1958 Graduated, Harvard College, Harvard Law School, Harvard Business School
1958 Joined First Chicago
1975 Chairman, chief executive First Chicago
1980 Dismissed from First Chicago. Joined Occidental Petroleum as president, chief operating officer
1984 Resigned from Occidental. Set up A. Robert Abboud & Co
1987 Chairman, chief executive, First City Bancorporation of Texas

Mr Abboud agrees he has strong opinions and convictions. But he has an answer to the critics. "I was, after all, the youngest chief executive in the history of First Chicago. I rose up through the ranks from trainee to chief executive. I didn't have any big stock position or family influence."

"How do you come through a *big structural organisation if* you've got some sort of flawed character? It just doesn't work that way – there are too many hoops to go through."

It was, certainly, an achievement for a man whose first experience of banking was to see his father's heating and ventilating business go bankrupt because he could not get a small loan.

Mr Abboud, a kid from the wrong side of the tracks in the clubby WASP-dominated world of US banking, seems to have come up the hard way. At Harvard, typically, he broke his nose twice, wrestling and playing American football. Later, after a spell in the Marines, including service in Korea, Mr Abboud worked to pay his way through Harvard Law and Business Schools, becoming an MBA at 29.

All set for a career in the international oil industry – an ambition he was only to fulfil years later at Occidental – he changed course in 1958 and joined First Chicago after being told that banking was more attractive and dynamic.

Ironically, the man who brought Mr Abboud into banking was Mr Gaylord Freeman, his immediate predecessor as chief executive and a man whose urbanity contrasted sharply with Mr Abboud's bluntness.

The difference of styles became apparent in 1975, when Mr Abboud was named chairman and chief executive. Faced by a string of problem loans, especially in real estate, Mr Abboud pulled in the reins on lending, creating "a rather unique situation" in Chicago, as he puts it. "One pole of banking activity was Continental Illinois which was going totally in one direction. We were across the street and on the other pole, saying this is all wrong – we want to be conservative."

Unfortunately, Mr Abboud's robust approach to loan management antagonised many of the bank's longstanding corporate customers. His personal style, too, caused a big morale problem, with droves of senior managers voting with their feet. When, finally, the bank was caught badly wrong-footed by a surge in interest rates in early 1980, Mr Abboud found himself on the way out.

Had things worked out differently, he says, he might still have been in charge at First Chicago. But at least he has had the satisfaction of seeing much of his strategy on problem loans vindicated – and, of course, Continental Illinois's chickens eventually came home to roost four years later.

Instead, Mr Abboud finds himself at First City, which after two years of significant losses, caused largely by the 1986 collapse in oil prices, was by late 1987 badly in need of fresh management blood.

Enter Mr Abboud and his team, with a new idea. It centred on a novel approach to the problems sweeping the Texas banking industry which he believes could be applied to other troubled institutions.

The idea was to ease the burden placed on the insurance funds, such as the Federal Deposit Insurance Corporation (FDIC), in bailing out troubled institutions. The aim was to harness private capital with federal assistance, using the federal money basically as a guarantee.

"I thought a mechanism really had to be found to go directly to the investing public because the problems were sufficiently large that insurance funds couldn't accommodate it," he says.

Through a small consulting company which Mr Abboud set up in 1984 after leaving Occidental, a search was mounted for an institution to fit the bill. "All of a sudden First City kept popping out of the model as being in a region that was going along the bottom and coming back out,"

He admits that at first he was sceptical. "I discounted it because I'd known the bank for years and years as the establishment bank of the area. I said of course this is nonsense. It couldn't possibly happen. Forget it."

But as First City continued to deteriorate, it could no longer be discounted. Eventually, on September 9 last year the FDIC presented rescue proposals involving Mr Abboud's group and Donaldson, Lufkin & Jenrette Securities. The FDIC would inject $970m of government money, while the Mr Abboud's group would provide $500m in new capital.

The aim was to complete the deal by the end of last year but the rescuers had to deal with a variety of problems. Alternative reorganisation plans based on the original proposals were considered; then came the October stock market crash. A holder of a small block of preferred shares sought special treatment, and with First RepublicBank's problems coming to the fore too, it was not until April 19 that the reorganisation was finally cleared.

But, as Mr Abboud stresses: "Anyone who has started a large project knows a pilot plan will work, but once you scale it you really have to have a shakedown." And if the exercise was to be repeated it would be easier.

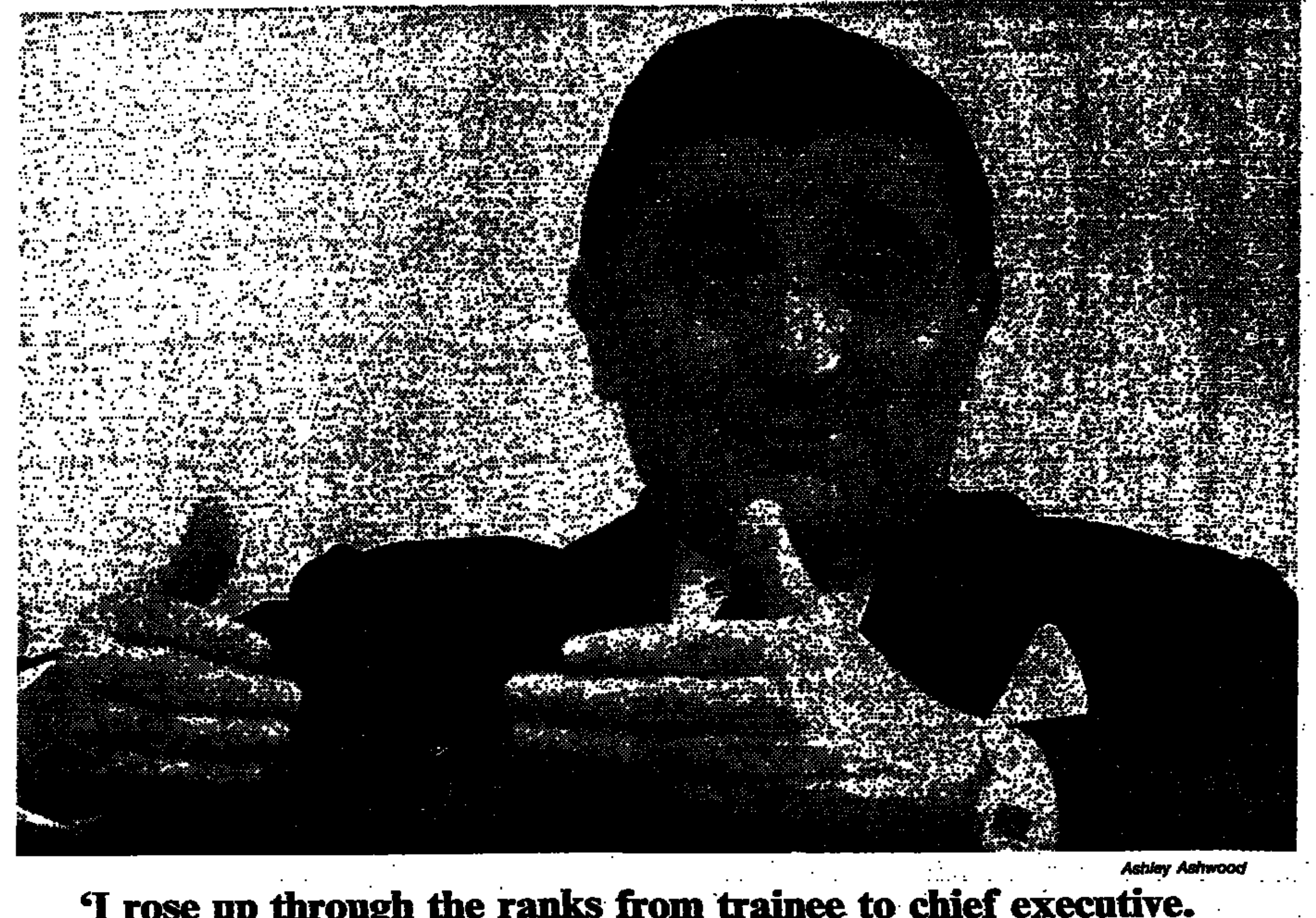
But what of the future of First City? Mr Abboud is not short of aims and in this he must be heartened by signs of a modest improvement in the Texas economy. The bank has got off to a sound start. The balance sheet has been cleaned up and cost cutting measures are underway.

In the longer term Mr Abboud wants to create a regional and super-regional institution which is "about one third commercial, one third retail, around 15 to 20 per cent in money market activities and the rest in venture capital, capital leasing and capital market operations."

"We want to carve out a position as one of the more important energy banks in the US. Energy's a good business if you stick to the aspect that a bank should stick to. We're not partners – we're bankers."

"Lending to the petrochemicals sector is another target and the bank "will also do agriculture." And, says Mr Abboud, in line with his contrarian philosophy, "We like trade. We are going to invest in the resources for trade. Many banks are moving out of that business right now, we're moving in."

True to form, Mr Abboud has, via the First City newsletter, been giving his new employees a few choice examples of his style of fighting talk, which leans heavily on such football metaphors as "bank on offense" and "blocking and tackling." One of his life's great pleasures, he says, was being a consultant to the Chicago Bears in 1985.



Ashley Ashwood

'I rose up through the ranks from trainee to chief executive. I didn't have any big stock position or family influence'

The Gibraltar coroner and judicial limits

JUSTINIAN

The historic functions of a coroner's inquest – the institution of the office of coroner is one of the oldest known to English law, dating back to 1194 – have passed through several transformations. The function of an inquest, if not another of its transformations, will be widely discernible when the inquest on the death of the three IRA terrorists in Gibraltar on March 6 opens tomorrow.

The essence of an inquest is the determination of the cause of the deceased's death. It is neither a civil action nor a criminal trial. Nor is it in any way concerned with civil or criminal liability, although lawyers frequently seek to extract admissions from witnesses or findings by the coroner's court which will assist in other legal proceedings which the deceased's family may be contemplating bringing against some public authority or individual who had been responsible for the care of the victim prior to death. The inquest is a fact-finding exercise and not a method of apportioning blame. There are no parties, no indictment, no prosecutor and no defence. There is no dispute between rival contenders who seek an adjudication from a tribunal. It is an inquisitorial process, not a trial. The process is one of investigation. It is the coroner who decides who shall come to give evidence before him, and it is he who questions them. The role of the witness's representative or the deceased victim's family is confined to asking questions only after the coroner has finished his examination of each witness. No one can address the court as to the weight of the evidence. Advocacy is limited to legal argument about procedure and the scope of the coroner's powers.

The rules relating to coroners specifically state that no verdict shall be framed in such a way as to appear to determine any question of civil liability or criminal liability on the part of a named party. Thus a coroner would not be entitled to include in his verdict a finding as to which of two persons had been the driver of a motor car at the time of a collision, where one of the two persons had been killed. It would be improper for the coroner to consider questions of negligence or criminal liability. A verdict of unlawful killing is, however, permissible provided that no person is identified as the perpetrator. Such a verdict may be recorded only when the coroner (or the coroner's jury) is certain on the evidence that the deceased died as the consequence of a homicide offence – murder, manslaughter or infanticide having been committed. Although a restricted verdict of unlawful killing would preserve the formal anonymity of those who shot and fatally killed the three IRA terrorists, such a finding would be both politically unwelcome and would lead to vigorous claims that the killers, who are well known to the authorities, should be prosecuted. The coroner's function is to go no further than his investigatory role.

The coroner has to investigate the facts when, where and how the deceased met his death. It is the "how" that is crucial.

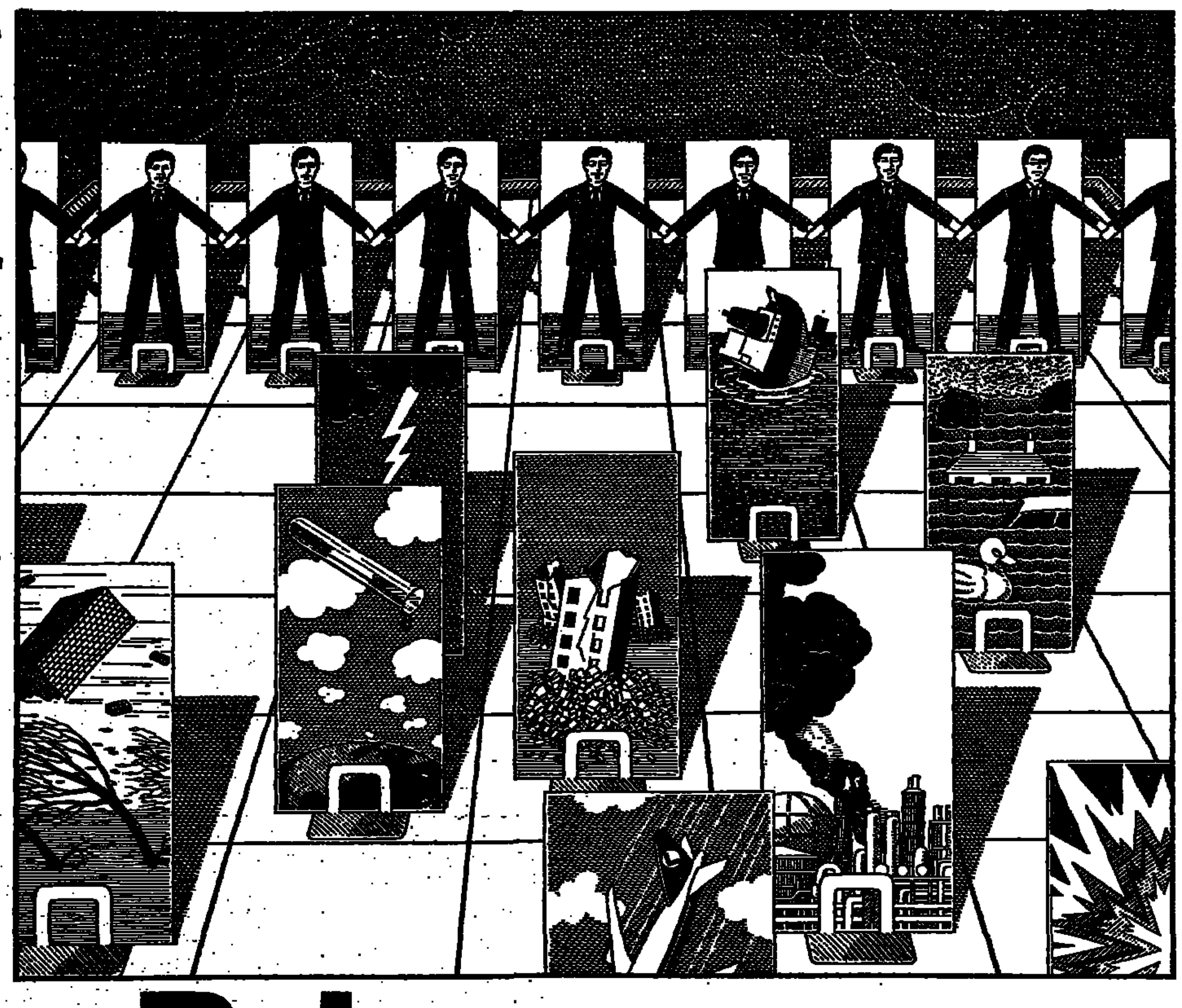
The limited jurisdiction of the coroner is to investigate the facts when, where and how the deceased met his death. No problem arises ordinarily as to the time and place of death. It is the "how" that is crucial. The coroner is not limited to determining the medical cause *of death. It would also be insufficient* for the verdict to record merely descriptively the cause of death that can properly include the circumstances of that death. It is now well established that the coroner may record that the cause of death was aggravated by lack of care/self neglect, not only where the verdict relates to medical causes but to any circumstantial death such as accident, misadventure, lawful or unlawful killing, or suicide. A finding of "lack of care" might look as if it was transgressing the rule that no civil liability must figure in the verdict. But the courts have said that the coroner's overriding duty is to inquire "how" death occurred, irrespective of whatever consequences may flow.

The crucial question before the Gibraltar coroner will be how far back in the events that led up to and surrounded the killings will he go to determine how the three died. Where those responsible for the death are part of an armed force or some other law enforcement agency carrying out a policy of conflictual intervention to deal with civil disturbances or prevention of serious crime, the circumstances would seem to include the nature of the policy and its effectual execution. But it will be a bold coroner who will step too far away, in geographical and physical terms, from the immediate circumstances that surrounded the Gibraltar deaths.

The conduct of the inquest by the Gibraltar coroner will also be closely watched for any indication of the need in future for this ancient institution. Over the years, it has been argued that, while violent or unexplained death may invariably need to be investigated, the quality of justice administered by coroners has been variable, and the procedure often fails to match the expectations of the relatives and friends of deceased victims.

SECTION IV

FINANCIAL TIMES SURVEY



Reinsurance

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The industry is uncertain how far the Piper Alpha disaster and the October hurricane will inhibit the softening of the market outside the US, writes **Nick Bunker**; while European reinsurers expect challenges from a cross-border insurance market after 1992.

Two shocks sustained

THE WORLD'S reinsurance community assembles today in Monte Carlo under the shadow of two catastrophes which evoke comparisons with some of the worst insured losses in history – the 1906 San Francisco earthquake and fire, Hurricane Betsy in the Gulf of Mexico in 1965, or the Munich hailstorm four years ago.

Property and liability claims resulting from the explosion which destroyed the Piper Alpha oil rig in the North Sea on July 6 are now expected to exceed \$1.2bn (£716m). That would make it by far the largest single loss the offshore oil and gas insurance market has suffered since it took its present shape at Lloyd's of London in the mid-1960s.

Already Piper Alpha has prompted a drastic hike in premium rates for what London market professionals call "rig specific" excess-of-loss reinsurance covers – though the word is that it will not be until next June that its full force feeds through to reinsurance pricing.

At the same time, London and continental reinsurers are grappling with the after-effects of "87-J" – code name for last October's western European hurricane. The insurance bill for 87-J's damage in the UK, France and Norway is heading beyond £2bn. Here again, though, the full impact is perhaps yet to be felt.

A key question among participants at this year's Monte Carlo *Rendez-vous de Septembre* will be whether the post-hurricane reinsurance premium rate increases applied last January were adequate, and whether 87-J is going to drive up prices in the retrocessional market, where reinsurers buy their own reinsurance. At the Rendez-vous, brokers and reinsurers start making deals to be consummated when most reinsurance contracts come up for renewal at the year-end.

Piper Alpha and 87-J struck at a time when the international reinsurance industry was already at a sensitive point in its history. Since the 1960s, it has usually accounted for a premium volume about one-seventh the size of the non-Communist world's non-life insurance revenues – which in 1986 totalled perhaps more than \$350bn.

By accepting a share in the insurance business written by primary carriers, reinsurers provide a mechanism for spreading the world's risks. In turn, they exercise an important influence on domestic markets – since easy availability of reinsurance can depress prices charged by primary carriers and, conversely, a shortage of reinsurance capacity can help drive prices up.

Nineteen eighty-seven and 1988 have been a sensitive period, because they have marked the peak of a sharp cyclical upswing in the industry's profitability. It began in 1984, when in the US – still by far the world's biggest consumer of reinsurance – premium rates began to rise again after six years of rate-cutting culminated in severe underwriting losses.

By late 1987, however, the main markets for US property/casualty reinsurance and for non-dollar property treaties were already weakening – whether by reducing prices, or by extending coverage limits.

The only market that has remained tight in London, for instance, is that for US liability. London reinsurers are wary of exposing themselves to the risk of meeting the bill for legal damages awards against primary insurers' policyholders.

A central question now is how far Piper Alpha and 87-J will inhibit the softening of the market outside the US, if at all.

In the US itself, however, there are positive signs for the industry, inasmuch as there are few indications of another headlong dash by reinsurers into aggressive price competition.

Admittedly, the domestic US reinsurance market is softening. This has been spotted by observers at Lloyd's, who partially attribute it to the relative absence of severe weather catastrophes in the US since Hurricane Alicia in 1983.

Hady Wakefield, deputy chairman of London's C.T.Bowring (Reinsurance), says that while rates are holding on large property-catastrophe treaties for major US primary insurers, there is "a lot of competition for smaller catastrophe business."

Some London reinsurance brokers believe that, at the year-end, US domestic reinsurers – unscathed by Piper Alpha or 87-J – will offer substantially keener rates and terms for US treaty business than their counterparts in the London market. London, traditionally, has played a key role in reinsuring US exposures.

However, a measure of softening in the US was only to be expected in the light of the healthy results reported in the second quarter of this year.

What seems to be happening is that the big direct writers of reinsurance – General Re, Employers Re and American Re, which deal direct with customers, rather than using brokers – now have sufficient influence over the reinsurance market to restrain rampant price-cutting.

It also looks as though the reinsurance market in the US has decoupled from pricing trends in the primary market. Reinsurers are not providing the impetus behind the rate-cutting under way in the primary market for commercial lines of property/casualty – and, vice versa, price competition in primary business is apparently not forcing parallel reductions in reinsurance prices.

"There *is* soft pricing in reinsurance in the US, but not the dramatic movements we have been seeing in the original business," says John Gardner, of the North American reinsurance division of Willis Faber, the broker.

There is also a well-rehearsed argument that the 1986 US Tax Reform Act will retard or prevent a descent by reinsurers into a maelstrom of rate reductions. The point is that the 1986 Act required insurers (and reinsurers) to allow for future investment income when allocating cash to their technical reserves against outstanding and unreported claims.

If, as expected, this raises tax bills substantially in 1990-91, then the reduction in cash flow could help turn the pricing cycle upwards in the primary and reinsurance markets.

Not every indicator is quite as positive for the industry. Apart from the impact of Aids on the life reassurers, one unquantifiable problem in property/casualty is the threat of claims arising from the clean-up of US hazardous waste sites.

"The true character of these losses hangs over the industry like a dark cloud with potentially disastrous consequences," wrote Mr Andre Maisonpierre, president of the Reinsurance Association of America, in the US magazine Best's Review this June.

In turn, there are few auguries of an abatement of the worldwide problem of uncollectable reinsurance, meaning reinsurance claims that will not be paid because reinsurers have collapsed or are in difficulties. And few actuaries would claim to have approached a solution to the complexities of computing reserves for "long tail" US-related liability reinsurance, where it may take 15 years after the inception of a treaty for claims to emerge, and ultimate settlements depend on unpredictable trends in court awards.

There are signs, though, of progress towards addressing technical shortcomings which have plagued the reinsurance community – such as London's notoriously slow exchange of premium and claims payments between Lloyd's syndicates, the company market and the brokers.

Next month London's Policy Signing and Accounting Centre, which provides central back-office facilities for reinsurance companies, is due to start operating a new mandatory claims settling scheme. It should speed up the flow of money and cut down administration by doing away with the need for every underwriter on a risk to approve settlement.

At the same time, work has continued in London on new codes of practice for the market. A working party from the Reinsurance Offices Association is understood, for instance, to have got as far as circulating a draft of its long-awaited code.

For reinsurers in London and continental Europe, however, the approach of 1992 – when the European Community is due to have created a single cross-border market in insurance – could pose the biggest challenges of the next decade.

The orthodox view – voiced by Horst Jannott, *chairman* of the management board of the Munich Reinsurance Company – is that 1992 will be a non-event for reinsurers. As far back as 1969, France became the last EC member state to comply with a 1964 directive providing for freedom of services in reinsurance: in theory, reinsurance experienced its 1992 20 years ago.

However, there is a counter argument, expressed by Jürgen Zech, chief executive of the Cologne Re. It is that the opening up of the European primary insurance market could engender fierce price competition which will erode the profitability of primary carriers, and make it that much more difficult for the big professional reinsurers – Munich Re, Swiss Re and others – to exercise discipline on the primary market.

What is more, the vogue for consolidation of the primary markets in France and Spain, via mergers and acquisitions, could reduce local demand for reinsurance if it creates bigger, stronger primary companies.

Coming on top of the existing worldwide trend for primary carriers to retain more of their own risks, that might hasten the present trend for the professional reinsurers – of which Swiss Re is the obvious example – to diversify further into the direct market by buying insurance companies in Italy, Spain and France.

THE US MARKET

Rates under siege

THE US reinsurance industry stands at a crossroads. Over the next few months, it will have to decide whether to follow the primary market into its scrimmage of competitive rate-cutting. Or the reinsurers can hold the line on rates till the primary market has lost so much money that it will take reinsurance protection at the reinsurers' prices.

In corners of the reinsurance market, competitive pressures are beginning to build up. But industry executives are hoping that rates and profits are not going to decline so sharply as during the competitive free-for-all of the mid-1980s. "The cyclical decline should not be so severe," says Mr Michael Jones, head of domestic treaty at American Re. "The dip will be a more shallow trough."

The trouble with reinsurance in the US this year is that it is just too profitable.

At the end of the second quarter, the $14bn industry enjoyed the sort of cost structure and claims experience not seen for 10 years. Mr Andre Maisonpierre, president of the Washington-based Reinsurance Association of America, believes that, by the end of the second quarter, the industry enjoyed a combined ratio of between 101 and 102.

This means that US insurance companies reporting to the association are paying out just a dollar and a cent in expenses and losses for each dollar of premium they pull in. The income from investing the premiums is pure profit and companies are reporting quite fancy earnings.

General Re, the market leader, has been writing reinsurance at a profit all year, with a combined ratio of 99.1 in the second quarter. Its net *operating profits increased 17.5* per cent – to $128.5m – in the second quarter over the second quarter of 1988.

These good profits are allowing reinsurance companies to rebuild their capital bases all but destroyed during the trough of the mid-1980s, when fierce competition in the primary market led to a collapse of profitability in almost every line of reinsurance.

In the first three months of 1988 alone, the equity base or policyholders' surplus of the 62 companies that write the bulk of US reinsurance increased 4.5 per cent to $9.07bn. This compares with a meagre surplus of $3.58bn during the dark days of 1984, when the industry was losing $1.25 for every $1 of business coming in. And the increase has occurred despite the repurchase of stock by companies such as General Re and Nac Re.

In normal circumstances, the increased capital would support *a higher level of premiums*, which in turn would simply increase competitive pressures and force rates down. But premiums are actually falling. According to Mr Maisonpierre, premium income in the first quarter was $184m down on the first quarter of 1987. At General Re, net premiums written have been sliding since the last quarter of 1986.

In the June quarter this year, General Re booked over 18 per cent less in net domestic property/casualty premiums than in the 1987 second quarter.

The obvious reason for the decline is that the primary companies are hanging on to as much business as they can because of the healthy combined ratios on offer. "We're seeing much *more sizeable* net retentions," says Mr Jones of American Re. These retentions can be running up to 50 per cent higher for some big insurers. This has inevitably meant that facultative reinsurance – *the laying-off of individual* risks on the reinsurance market – is declining as a proportion of the business being done.

A second reason is related to the tax reform of 1986. Reinsurance companies, which typically pay out years after an accident, are now required to discount their loss reserves to recognise the time it will take before they actually pay out. "It's getting harder to grow capital," says Mr Jones. "That could help to slow down the *competitive pressures.*"

In the treaty market, the underwriting weakness does not seem to be carrying through into lower rates. On the property side, where rates in the primary market are as much as 25 per cent down, "there isn't a lot of pressure for reducing rates," says Mr Jones. Meanwhile the casualty business, where the primary market is healthier, is "holding up very well," he says.

Other re-insurers report some slippage in rates and in terms. "But the market is not softening in anywhere near the same degree at the primary market," says Mr Herbert Goodfriend, an insurance analyst at Prudential-Bache on Wall Street.

The firmness in reinsurance has a lot to do with General Re, which is setting an example of market discipline. Rather than plunge surplus capital into the business, it has spent money buying *its own* stock: its shares outstanding were 7 per cent lower at the end of June than at the end of the first half of 1987.

How long reinsurance can resist the price pressures in the primary *market is* anybody's guess. Mr Goodfriend, along with the bulk of Wall Street analysts, believes the market will soften markedly in the last quarter. "Reinsurance rates will have a taken a significant hit by the year end," he said in August. "Just wait for the renewals season in November."

Mr Maisonpierre keeps his hopes alive. "I think the vast majority of reinsurance company managements vividly remembers 1984 and 1985 when *combined* ratios were in the 120 to 130 range and companies had very serious difficulties," he says. "They are hanging tight even if it means less market share and premium."

James Buchan

1987 Top reinsurance company results ($000s)

Company	Net Premiums Written	Net Premiums Earned	Losses & Loss Adj. Expenses	Loss Ratio (%)	Underwriting Expenses	Expense Ratio (%)	Combined Ratio (%)
General Re Group	2,235,802	2,353,496	1,749,349	74.3	570,482	25.5	99.8
Employers Re Corp	1,251,896	1,274,005	1,018,147	79.9	249,673	19.9	99.8
American Re-ins Co.	1,002,760	1,007,661	760,851	75.5	241,252	24.1	99.6
Prudential Re	692,379	700,533	555,956	79.4	204,306	29.5	108.9
Munich Re	679,142	688,276	472,840	68.7	211,965	31.2	99.9
North American/Swiss Re	647,467	654,921	439,898	67.1	240,716	37.2	104.3
USF&G Re Group	413,187	410,803	295,768	72.0	109,162	26.4	98.4
Skandia America Group	380,349	306,051	243,662	79.6	95,232	25.0	104.6
National Re	316,110	332,702	271,147	81.5	65,328	20.7	102.2
Transatlantic Re	305,211	286,550	232,152	81.0	73,104	24.0	105.0
Kemper Re	304,058	327,830	269,799	82.3	59,693	19.6	101.9
Continental Re	289,271	293,778	213,672	72.7	106,668	36.9	109.6
Cigna Re	273,536	277,765	203,782	73.4	78,072	28.5	101.9
Constitution State MGT	248,051	251,883	191,065	75.9	60,161	24.3	100.2
Constitution Re	234,786	230,439	169,095	73.4	59,898	25.5	98.9
Total	13,555,836	13,500,136	10,367,797	76.8	3,596,461	26.5	103.3

The London market: non-US risks

Predict with caution

LAST TIME London's reinsurers made their annual pilgrimage to Monte Carlo, talk revolved around suspicions that premium rates and treaty terms for non-US business were softening again after three years of steep price increases.

Now, 12 months on, the market for big international property treaties is undoubtedly heading downhill; but two huge insured losses – the October 1987 European hurricane and the July 6 Piper Alpha oil rig explosion in the North Sea – have complicated the picture, to the point where brokers and underwriters are making predictions only with extreme caution.

In mid-year, there was heavy competition for most non-US property-catastrophe treaties. At the July 1 renewals – which included most Australian treaty business – the result was "a continued decline in pricing structures," says Dieter Losse, of Greig Fester, the Lloyd's reinsurance broker. "Reinsurers generally have taken the brakes off," he adds.

Reasons for the easing of non-US property excess-of-loss treaty rates – which have fallen 10-15 per cent on average this year – are not hard to find. The absence of major weather catastrophes outside Western Europe was one.

But observers also say that the big European professional reinsurers, especially the Swiss Re and Munich Re, are aggressively seeking more excess-of-loss property business at a time when, first, the trend for primary carriers to retain more of their own risk has reduced the volume of demand from buyers; and second, a lot of liability business is still looking unattractive.

In addition, Lloyd's syndicates are still awash with excess capacity – in spite of this year's surge of resignations from as many as 1,500-1,700 underwriting members – as the weakness of the US dollar and falling premium rates depress their income levels.

"The international property book is still very, very attractive – and there just isn't enough of it to go round," says Ron Iles, chairman of Alexander Howden Reinsurance Brokers, who sees little prospect of an end to the softening market for that type of business.

The hardest thing at the moment is to assess the extent to which the after-shock of the October hurricane and Piper Alpha could slow up the downturn. This they could do, if they force a tightening-up of the retrocessional market, where reinsurers buy their own reinsurance.

At the 1988 renewals in London, the hurricane led to relatively small immediate price increases for UK, French or Scandinavian treaties. "For the most part, when reinsurers were renewing last January, they were very unsure about how big the loss was going to be," says Losse.

In other words, the real impact of the hurricane probably has yet to be felt: there are signs already that, when negotiations for the 1989 renewal season start to get under way in the next six weeks, reinsurers will try to increase the cost of protection for UK and French primary insurers.

"The big question is whether the rate increases imposed on January 1 were enough," says John Pelly, Willis Faber's UK regional reinsurance manager.

One factor looming very large in reinsurers' minds is that late-reported claims from the hurricane were still arriving in the direct market well into the summer – producing a series of upward revisions of forecasts of the ultimate loss. Royal Insurance, for instance, has upped its estimate of its hurricane losses from £80m a month after the event to £105m last February and £123m three weeks ago.

Second, the hurricane is already producing the notorious "spiral" effect as it starts to hit underwriters of London market excess-of-loss (LMX) reinsurance – which provide the main retrocessional market for most Lloyd's syndicates and London company reinsurers.

As reinsurers that have paid claims from primary carriers begin to recover money from their own non-marine retrocessionaires, so the hurricane losses will be passed round the LMX community in a spiral of claims which – in aggregate – could be three or four times as great as the original claims.

One reason for this is the development over the last five years of the new breed of specialist Lloyd's excess-of-loss reinsurance syndicates, which make their money solely from an intricate game of reinsuring each other: this means that, when a big loss comes into the market, nobody knows where it will end up. As a result, reinsurance claims arising from the 1983 Hurricane Alicia in the US are still being settled in the London retrocessional market – and some fear that the October hurricane could produce a still bigger, longer spiral of claims.

Piper Alpha's impact on the marine LMX market could be even more severe – especially as it came hard on the heels of another offshore disaster, the $300m total loss of the Enchova gas platform off Brazil.

The estimated $1.2bn arising from Piper Alpha – easily the biggest man-made disaster ever to hit insurers – could produce a spiral of claims in the retrocessional market which might take 10 years to settle, according to Hugh Kirkland, head of the marine division of E.W.Payne, London's biggest reinsurance broker. "Once it gets into the retro market, the cash collection could multiply five or ten times," he says – with about $3bn-4bn falling on LMX underwriters.

The immediate effect of the explosion has been to halt the past year's rate-cutting on energy-related marine LMX treaties, and force steep pre*mium rate increases – sometimes* of as much as 200 or 300 per cent. Kirkland quotes a case of a Lloyd's syndicate which last month bought a layer of oil rig cover of $5m in excess of $42m and paid a rate-*on-line of 2.75 per cent, up from* 1.35 per cent in 1987.

However, brokers say the full impact of Piper Alpha on marine reinsurance pricing – like that of the October hurricane on the non-marine market – *is unlikely to emerge definitively* until perhaps a year after the event.

This is because Piper Alpha exploded on July 6, less than a fortnight after the renewal of the London Master Drilling Rig Contract, a huge offshore oil and gas insurance facility renewed at Lloyd's in late June each year.

As a result, most London market oil and gas underwriters also renew their reinsurance covers around July 1, and so will not see the impact of additional post-Alpha reinsurance costs until next July. In the near future, the best indicators of how the market will behave then are due to come on October 1, when some important Lloyd's syndicates renew their energy reinsurance

Piper Alpha: one of two huge disasters

"The message we are getting from the professional buyers is that Piper Alpha is not going *to hurt them* in the 1989 underwriting year," says Kirkland.

One strong possibility, though, is that when it hits the retrocessional market Piper Alpha could have side-effects for the London reinsurance *market as a whole – not just* the marine segment of it. "There's no doubt that reinsurance claims from Piper Alpha will spill over into the non-marine sector," says Greig Fester's Losse.

The reason, says Kirkland, of E.W.Payne, is that during 1987 many oil and gas underwriters were able to stop buying "rig-specific" reinsurance protection, and instead covered themselves under their general, non-energy related excess-of-loss treaties.

So – in theory – the combined effect of Piper Alpha and the October hurricane *could* slow down the rate at which the whole London reinsurance market is softening, if the losses falling on the retrocessional market force LMX underwriters to raise prices substantially across their whole book of business.

Yet, with 28 new *Lloyd's* syndicates due to start underwriting next year, few observers are laying too many bets on seeing a hardening of the London market this January.

A best guess is that most primary insurers buying non-US non-marine property cover in London will still be able to get lower rates and easier terms this January – but that reinsurers will have to pay more for their own retrocessions.

Nick Bunker

REINSURANCE 3

October's hurricane is still blowing through the London market

87-J will break all records

"WE HAVE experienced in our backyard the world's greatest single natural disaster in the history of insurance," says reinsurance broker Michael Stephens, of Alexander Howden, spelling out the enormity of last October's hurricane that hit south-east England and north-west France before veering off to wreak further damage in Scandinavia.

Insurers were taken by surprise by the October storms, now referred to by the Lloyd's catastrophe number "87-J". The bill for 87-J is now over £2bn and rising. Most is accounted for by £1.1bn property damage in the UK (75 per cent of it domestic claims), £700m in claims from France, and £100m from Norway. Claims arising from business interruption are still arriving.

The loss, says Mr Stephens, is bigger than the total sum paid to date by the market on asbestos-related bodily injury claims, and exceeds "by far, in current economic terms, all the major hurricanes, earthquakes and other natural disasters that have occurred in the past".

Number 87-J dwarfs Alicia, the hurricane which hit Texas in 1983 causing losses of US$1.1bn and the biggest previous impact on London reinsurers specialising in property and catastrophe risk through London Market Excess (LMX) covers.

The effect such a large loss has on rating and capacity is complex. Before the October hurricane, reinsurance rates had been expected to fall. Although rates had slipped during 1986 and 1987, they were still high enough to push composites like Royal Insurance and Sun Alliance into ending their reinsurance programmes (a policy quickly reversed by Royal after the hurricane).

With new capacity entering the market, however, a substantial reduction in premiums had been expected. Although, at the end of last year, estimates of the damage caused by 87-J were much lower, its impact was still sufficient to stopthe downward trend in its tracks; and at least one UK composite faced an increased bill for its reinsurance programme in 1988.

Now, with the full scale of the loss apparent, it might be expected that a dramatic increase in rates is on the cards. This is especially the case because it is generally accepted that some of the lowest layers on reinsurance contracts bought by Britain's composite insurers are still relatively cheap, and have not kept pace with the values at risk or the potential exposure. Nor do they reflect the increasing incidence of weather claims. According to Mr Stephens: "Severe weather in this country has occurred in five out of the last six years and can no longer be regarded as exceptional."

Two factors could militate against any major rise, however. First, there is no shortage of capacity on the market – despite 87-J and the loss of the offshore platform Piper Alpha. Second, the strength of sterling and rumours that for the Lloyd's market 1986 will be another prosperous underwriting year keep players bullish.

Capacity from the marine market, where the continued long-term slump in international shipping business means there is less traditional marine insurance to write, is continuing to spill over into the non-marine sector. And no fewer than 22 new syndicates, each mustering some $8m in capacity, are set to begin underwriting in 1989. All that adds up to a highly competitive climate which will give little room for any substantial rate increases. As a Lloyd's underwriter points out: "Some of these new guys would write the business at 90 per cent of 1988 premiums."

At the same time, cover on the retrocession market was already very expensive before 87-J, and it is difficult to see how rates could be increased further without making such cover uneconomic to buy. Exposure to hurricane Alicia led many retroinsurers to increase traditionally cheap rates sharply from 1983 onwards. According to one Lloyd's underwriter, rates increased by an average of 300 per cent between 1983 and 1987.

In 1983 underwriters had been looking for a "payback" (the number of years premium necessary to pay for the limit of cover bought) of five years for bottom layers and 40 years for top layers. By 1987 a two-to-three payback for bottom layers and 10-year payback for top layers had become customary.

"With 30 or 40 on your bottom line, it is difficult to see where you can increase it to without turning your client away," points out an underwriter with one of the major reinsurance companies.

After 1983, conditions were also tightened, with many reinsurers on the retromarket insisting on a "co-insurance" of 5 per cent of the total cover ceded. That coinsurance requirement could now be increased to 10 per cent, according to market sources. This is a possibility the market has considered for some time and, according to one retroinsurer, "the storm will focus minds on it".

Richard Lapper
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BANKING AND REINSURANCE

Trusts still on trial

THE RELATIONSHIP between the banking industry and the reinsurers has been an important facet of the banks' wider relationship with the overall insurance market.

For banks, reinsurance is a demanding specialist area, with players looking for a high standard of multi-national, multi-currency services. For reinsurers, banks have been an indispensable provider of mainstream business support, helping to develop products and open up markets, in particular the US and Europe.

The US market dominates the reinsurance business from its position as the provider of around 50 per cent of the total premiums paid in the world. The significant banking products associated specifically with reinsurance have tended to be orientated firmly towards the US, and aimed at compliance with the complicated US regulatory requirements.

US banks, notably Citibank, led the way in developing facilities like the Letter of Credit (LC) and the more recent Regulation 114 Trust, both designed to guarantee the collateral of non-US insurers of US business.

The traditional LC business is still growing in volume, according to Richard Holmes, vice president of the insurance banking division of Citibank: "We see plenty of capacity for growth here. UK clearing banks are starting to enter the market and we are being kept on our toes by the regulators."

He cites the regulatory change in December last year, whereby delivery for LCs was enforced and renewal periods severely restricted.

The US National Association of Insurance Commissioners (NAIC) recommended that non-US banks be admitted to the LC business only as recently as June 1987. It took until December the same year for the New York Commissioner to adopt the recommendation and allow Barclays to enter the market using its US office.

Barclays had positioned itself cleverly. Long-term negotiations with Chase Manhattan were at an advanced stage, and were finalised around the time the New York breakthrough was achieved. As Chase withdrew from the LC business, Barclays took over its LC book and has since been gradually issuing new credits to substitute the Chase letters.

The withdrawal of such a major US bank from the LC market sent a shockwave through the reinsurance industry. Competitor banks make no secret of the fact that they compete with the near-monopoly position of Citibank, but they point out that the monopoly is not as strong as it has been in the past.

Rumours that the price of LCs may have to rise dramatically in response to higher capital requirements for US banks have led to suggestions that several players are considering pulling out of the traditional LC business. This has focused worries that Citibank's eminent position might be further strengthened to the detriment of competition.

This puts the arrival of UK banks, like Barclays and Midland, into clearer perspective. In the short term they might make small inroads into the market. In the longer term, their knowledge of the London market will help them.

To some extent Citibank's competitors have tried to develop and enhance alternative products like the Regulation 114 Trust, ironically pioneered by Citibank in late 1984. Patricia Odell of Bank of America says: "Trusts were in many ways an answer to a banking problem rather than a reinsurance problem. An alternative to LCs was needed to stimulate competition."

The development of the Regulation 114 Trust has been somewhat double-edged for the London market, where the under-writing practices complicate the Trust arrangement. However, a new generation of synthetic multi-beneficiary Trusts, which will suit the London market, is being developed. For example, Manufacturers Hanover will launch a major reinsurance product in the autumn.

Leslie Savran, vice president of Manufacturers Hanover's Escrow and Agency department, explains: "We believe that the cost of LCs can only go higher, because banks will have to put up reserves against their contingent liabilities, to the extent where their credit rating and hence cost of borrowing could be adversely affected. The advantage of escrow relationships is that they are off-balance sheet and are not credit relationships. They are cheaper than LCs."

Using an SEC-registered mutual fund as the common vehicle, Manufacturers Hanover can create a database and manipulate it to serve the different users, informing them of their risk or credit position. "The trust contract is much cheaper than a LC – we can use a uniform document, because there is no credit relationship involved," says Savran.

Savran argues that the scheme should appeal to users of LCs who have securities as a high proportion of their assets. Manufacturers Hanover already has $11bn in escrow relationships.

It is too early to say whether trusts will make a decisive impact on the industry. If the cost of LCs does not rise, it may be that Trusts will disappear with their principal marketing advantage. Critics say trusts are not as cheap as they might appear. In volume terms, set against the huge ocean of LC business, they are a small drop.

Andrew Freeman

Profile: George Graham assesses Scor's impressive recovery

Rediscovering its niches

A DIVIDEND of FFr1.50 a share may seem modest for a company earning FFr26 a share. For France's leading reinsurance company, however, the fact of paying a dividend at all sets the seal on a difficult recovery.

Société Commerciale de Reassurance (Scor) had initially planned not to pay any dividends until it had used up its accumulated tax losses. But in 1987, despite costly disasters weighing on the underwriting result and the stock market crash depressing earnings, Scor managed to hold its own with net profits up 2 per cent to FFr205m.

More important, perhaps, it has succeeded in building up its capital base, thanks to a FFr356m rights issue last year and another FFr625m issue this summer, to a level from which it has been able to embark on the acquisition trail, with the purchase of La Vittoria Riassicurazioni, the reinsurance subsidiary of Italy's Toro group, for around FFr690m.

The change from the early 1980s, when Scor chalked up heavy losses, is marked. The group had to retrench and focus on the areas it knew best, but now appears to have refound the niches where it can make money.

"Reinsurance was entirely a buyer's market up to 1975. In 1979 to 1980, when the storm rose, Scor was caught with all its sails set: it was too weakly capitalised; all its exposure was in dollars, and its exposure was excessive," comments Mr Patrick Peugeot, the former adviser to Mr Jacques Delors at the French finance ministry, who took over at the head of Scor in 1983.

The recovery plan involved cutting back the amount of business accepted, and reorganising the North American operation, Scor Re, which was the source of much of the group's losses.

With the aim of refocussing on its domestic base, Scor has brought a broader range of French insurance groups into its capital, including the private sector insurer Axa Midi, with 10.5 per cent, and a number of mutual insurers, with 16 per cent between them; but the state Caisse Centrale de Reassurance remains, after the July 1988 capital increase, the largest single shareholder with 23.28 per cent, and the public sector still owns over 60 per cent of Scor's capital.

Last year saw a series of disasters which weighed heavily on earnings. The hurricane that hit southern England and Brittany cost France FFr3.4bn in damage – a gross loss of FFr147m for Scor, reduced to FFr26m net by retrocessions. The explosion of a gas cloud over the Celanese plant in Texas, cost Scor another FFr64m net. Hailstorms, floods and tornadoes cost Scor Canada C$2.3m net.

Scor also decided to set up large reserves, both in the life department and the legal liability classes for suppliers of blood products, in order to meet the foreseeable consequences of Aids.

Yet the group managed to return an underwriting profit of FFr96m, its first positive technical result for years; with especially strong underwriting profits on facultative reinsurance of major industrial risks written in Paris, facultative casualty business written in the US, and treaty business in specialised branches such as 10 year construction liability, financial cover and credit.

Investment income fell to FFr628m, and a reserve of FFr187m was set up to allow for portfolio losses in the wake of the crash, but net earnings remained stable at FFr205m.

With this encouragement, Scor has begun to expand again. The purchase of Vittoria takes it into the Italian market, where analysts expect rapid growth in volume over the next few years.

Although Scor ranks as the ninth largest professional reinsurance company in the world, and fifth in Europe, its FFr3.4bn of net premiums in 1987 place it in a different league from the two largest groups, Munich Re and Swiss Re. However, Mr Peugeot says Scor's aim is not to match these giants in breadth of coverage, but to maintain its competitiveness in its chosen areas of expertise – such as large industrial plants, major construction sites and energy-related risks.

Mr Patrick Peugeot: not out to match the giants

Security: **John Gardner** discusses some important aspects of the function

Why prevention is better than the cure

IT IS always quite easy to tell what the burning issues of the day are in any particular industry: just see what the conferences are about. Recently reinsurers have been inundated with "Recovering Reinsurance", "Irrecoverable Reinsurance", "Insolvency and Liquidations – a practical guide to recovery".

It is clear what has been happening. Reinsurers have not been paying, either because they cannot, or will not or are just not around any more.

This quite incredibly expensive *malaise is far from* being "old hat". Many more millions are still to be lost, and made, by those unfortunate, or fortunate, enough to be in either the dispute or the recovery process. But it is surely time to start looking at the extent to which our industry has properly recognised that prevention is better than the cure.

Certainly buyers and sellers have now recognised that they must be infinitely more careful in drafting and conforming to reinsurance agreements – surely comparatively the most casually prepared and carelessly interpreted contracts of all time.

However, the principal change is that buyers have clearly come to recognise that it is vitally important to take every reasonable precaution to ensure that they are buying from sound security, from companies that will still be around *when the time comes to collect* and then can and will pay what they contracted so to do.

This has resulted in the security function within insurers and brokers gaining a far higher profile. Security committees are now a fully accepted and influential element in the decision-making process, and information agencies such as International Insurance Financial Services, Financial Intelligence and Research and Insurance Solvency International (ISI) have been formed to gather, process and distribute the necessary data in formats that substantially reduce the essential labour of basic analysis.

These committees have now developed their own standards, the basic levels of performance and strength for a reinsurer that are pre-conditions to consideration as acceptable security. There is an infinitely greater awareness of the need for dispassionate, indeed cynical, examination of financial returns. The good old days of "good chap" relationships have gone forever.

Furthermore, the industry is – *in a manner of speaking* – moving west. Controversially, ISI has always published test performances against standards, rather like the tests conducted by the US National Association of Insurance Commissioners under its Insurance Regulatory Information Service (Iris), which tries to give early-warnings of potential insolvencies.

Failure to meet a standard is an amber light, alerting the analyst towards certain areas before decision-making. However, and this is a very real reflection of human nature and frailty, too many, often for good but, usually, bad reasons want the decision made for them. This is giving rise to the one really significant recent development in this segment of the reinsurance industry's business: rating.

Rating started years ago in the US, where in the primary *market the standards* have long been set by New Jersey-based A.M.Best, the rating agency. Although there are some fundamental differences between the supply and demand for corporate debt ratings in the financial sector, or insurance company ratings in the US primary sector, and the unique characteristics of the international reinsurance market, ISI and Standard & Poors are experiencing an ever-increasing demand for ratings both as an alternative to A.M.Best on US carriers and, more significantly, on non-US reinsurers, arising from standards and demands set by in-house security committees.

This is an evolutionary process. It will be some time before it becomes standard practice for buyers to ask for a rating on, say, one of the great German or Swiss reinsurers. I cannot see an A+ or AAA reinsurance company yet *being* able to charge more, just as AAA corporate debt issuers pay less, as an automatic or fundamental element of the insurance rating process. Nevertheless, we may be moving in that direction.

The kernel of rating is that, however much quantitative calculation enters into it, the key element is qualitative judgment. Although the trend towards greater disclosure of information must reduce the scope for error, the great criticism against the principle of rating, particularly of non-US companies, is that as so often there is so little real information provided, the errors must creep in. Thus the Association of British Insurers' Statement of Recommended Practice on insurance company accounting and the European Community's Draft Directive, on the same subject, are very much to *be welcomed. Not only* will they achieve a more consistent format but they will make a real start at improving the great area of mis-information: true asset values, the effect of reinsurance and underwriting year loss development.

Undoubtedly, the more information the industry provides and has to analyse about the trading experience and financial strength of its security must increase the chances that the use of poor security will arise from commercial pressures and misjudgment and not plain ignorance or greed.

In recent years we have identified some 300 non-US companies that have been used as reinsurers, or listed on the Schedule F of the US Convention Statements which insurers submit to state regulators, but are now no longer in the reinsurance business. (About 100 comprise the well-known failures). Using our current methodolgy against the then available published statements, if rateable, their rating would have been adverse. Wise after the event? Stable-door syndrome?

Maybe, but the new skills and information now would have rejected many then. Yet even with all this knowledge and bitter experience, we still find world-wide including the US that 20 per cent of companies appearing as accepted security or on Schedule F have some features that call for an analyst's serious attention and a conscious decision by an insurer's or reinsurance broker's security committee.

The industry is now better equipped to avoid using poor security. It knows a lot more and is getting direct or from the rating agencies much better information and guidance, but the market place is constantly evolving. Horrendous catastrophes will happen and standards must be adapted and disciplines imposed to avoid disasters for one's own company or being harmed by disasters in others. Great vigilance in anticipating the worst means we must constantly call for better disclosure and use that information in more purposeful analysis and decision.

The author is managing director of Insurance Solvency International Ltd, the London (UK) and Hartford (US) based rating agency.

Regulation: **Rachel Treichler** considers proposals that are before the NAIC

Rules may alter for overdue recoverables

INSURANCE REGULATORS in the US are considering a significant change in the accounting requirements applicable to property/casualty reinsurance. The change is intended more accurately to reflect the impact of overdue and uncollectable reinsurance on the financial statements of property/casualty insurers.

It would require property/casualty insurers to recognise as overdue a portion of their recoverables from reinsurers authorised in the US. In cases in which more than a small portion of the recoverables from a reinsurer are overdue, the proposal would require recognition of a portion of all recoverables from that reinsurer as overdue.

While few would question the appropriateness of requiring recognition of overdue reinsurance recoverables, given the number of reinsurer insolvencies in the past few years, there may be some unintended *side-effects to adopting* a change of the type proposed. Among the consequences that may result is a rise in the price of reinsurance, additional demand for reinsurance by US insurers, and erosion in the competitive position of US-authorised reinsurers compared with their foreign rivals.

The proposed accounting change is expected to be adopted this autumn by the National Association of Insurance Commissioners (NAIC). It would deny US property/casualty insurers credit on their 1989 statutory financial statements for 20 per cent of reinsurance recoverables that are 90 days past due and undisputed, unless those undisputed recoverables are secured by letters of credit, trust accounts or funds withheld.

In cases in which undisputed overdue recoverables from a reinsurer exceed 10 per cent of all recoverables, including recoverables for losses incurred but not yet reported (IBNR), from that reinsurer, the proposal would deny credit for 20 per cent of all recoverables, not just the portion overdue.

Although the NAIC discussed a proposal which would have applied only to overdue recoverables under reinsurance contracts entered into in and after 1988, the proposal currently before the NAIC would apply to overdue recoverables under all outstanding contracts. The portion of of overdue recoverables to which the proposal would apply in 1989 is 20 per cent. The percentages to be applied in subsequent years have been left open by the NAIC, to be decided when additional data has been gathered.

Credit would continue to be allowed without funding for reinsurance recoverables in dispute, except for recoverables in dispute with an affiliate in cases in which arbitration or litigation has not yet commenced. Amounts in dispute, however, will be required to be disclosed in the annual statement.

Few would question the appropriateness of recognising *overdue reinsurance recover*ables on the financial statements of property/casualty insurers, especially given the number of reinsurer insolvencies in the past few years,

Nevertheless, the proposal represents a significant change from US credit for reinsurance rules. Currently, they do not require property/casualty insurers to recognize reinsurance as uncollectible prior to the declared insolvency of the reinsurer.

The effect of the proposed loss of a credit for a portion of its overdue reinsurance recoverables upon an insurer unable to obtain the necessary funding would be to accelerate the hit to surplus which would result if the insurer were to write off a portion of those recoverables.

Although the penalty to surplus would be limited to 20 per cent of an insurer's overdue recoverables in 1989, the penalty for the industry could be significant if current estimates as to the amount of overdue reinsurance are correct.

Statistics published recently by Myron Picoult, insurance analyst with Oppenheimer & Co, using 1987 financial statements, show that the percentage of reinsurance recoverables to policyholders' surplus ranges from 21.8 per cent to 331.5 per cent for 18 leading US property/casualty insurers.

Piccoult calculates that the year-end reinsurance recoverables of 27 leading US property/casualty insurers averaged 110.9 per cent of policyholder surplus. He reckons that at least 16 per cent of the reinsurance recoverables of the industry as a whole are uncollectable.

Using the figure of \$62bn as an *estimate of* the total reinsurance recoverables of the industry – excluding recoverables from affiliated companies – he estimates that the amount of recoverable reinsurance for the industry as a whole is \$10bn. If the proposed NAIC penalty to surplus figure of 20 per cent were applied to this, the reduction in the industry's total policyholders' surplus would be \$2bn.

Adoption of funding requirements for reinsurance overdue from authorised reinsurers would also remove some of the competitive advantages presently enjoyed in the US reinsurance market by US authorised companies.

Under existing US regulatory requirements, credit is denied for reinsurance recoverables from unauthorised reinsurers – whether overdue or not – unless those recoverables are funded. The proposed accounting change would impose a similar funding requirement with respect to overdue recoverables from authorised reinsurers.

The difficulty of predicting which authorised reinsurers may become overdue – and to what extent – may lead US ceding insurers to require funding of all recoverables from most authorised reinsurers, including those attributable to IBNR.

In addition, increased demand for funding would raise the cost of providing authorised reinsurance, and might lead authorised reinsurers to raise prices to cover the increased cost. It might also raise the cost of letters of credit and trust accounts, which could further raise the cost of reinsurance.

The additional cost attributable to increased funding requirements may cause some authorised reinsurers to forego authorised status if such status no longer qualifies the reinsurer for an exemption from funding requirements.

At the same time that the proposal might lead to a rise in the price of reinsurance, it would increase demand for reinsurance, because insurers would need surplus relief to offset the penalties to surplus that would result from the loss of credit for a portion of overdue recoverables.

As regards funding mechanisms, the proposal would deny credit for a portion of overdue reinsurance recoverables, unless those recoverables are secured by letters of credit, trust accounts or funds on deposit with the ceding insurer. These are the same types of funding devices currently authorised under existing US regulatory requirements to secure unauthorised reinsurance.

If funding is difficult to obtain from an authorised reinsurer under existing reinsurance agreements, because of *the lack of any contractual* obligation to provide such funding, regulatory provisions in a few states may permit the non-insurer parent of the ceding insurer to put up the necessary funding.

For instance, New York Regulation 20, as amended in 1986,

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PROFILE: COLOGNE RE

Winds of change

COLOGNE RE may be the world's oldest reinsurance company, but Mr Jürgen Zech, its chief executive since January 1987, does not show quite the same venerability.

A trim and youthful-looking 49-year-old, he joined Cologne Re (Kölnische Rückversicherung) in 1986 as deputy chief executive after 10 years on the board of Colonia, the leading primary insurer which is part of the same group.

The company, founded in 1846, says that its 1986 net group premiums of DM1.9bn make it Germany's second biggest reinsurer.

Cologne Re's figures speak for themselves. Despite likely claims of DM40-45m from last October's storm, which swept much of western Europe, it expects profits for 1987 to exceed the DM63m it earned before tax in 1986.

"Nineteen eighty-seven will be a good year," says Mr Zech. Despite the stock market crash, which caused "considerable write downs", and the hurricane, the overall result "has improved".

The better earnings also come despite the lower dollar, which reached a nadir of DM1.58 in December. Cologne Re works to the calendar year, which means it has had to use December's exchange rate in converting its US investment income, depressing 1987 earnings in Deutsche Mark terms.

By contrast, this year's stronger dollar has helped investment income perk up, and prospects for 1988 "looks better already", says Mr Zech.

But a range of other problems is confronting all Germany's reinsurers. Mr Zech takes issue with those who claim that reinsurers, unlike primary insurance companies, will escape the competition that will surge after the opening of European borders.

Nineteen ninety-two will not affect the reinsurers directly, "but indirectly it will affect us very much", he says. "It is of prime concern to our cedents. What is of prime concern to them has to be of prime concern to us."

He thinks a change in the nature of German primary insurance is inevitable. Not only will competition increase, but the business will also become more complex and diverse, giving reinsurers a tougher job in assessing their cedents' risks.

Mr Jürgen Zech: reinsurance will become more complex

Competition among primary insurers will also lead to lower premiums and tougher conditions — and eventually start to erode profitability. The upshot is that reinsurers will have to keep a much closer eye on their cedents' business.

There may be few signs yet of these new pressures, but the early winds of 1992 are already blowing as far as the Cologne Re is concerned. Greater advice is being sought by its cedents.

With their sophisticated financial analysis and scientific and technical expertise, reinsurers are accustomed to advising cedents on the business. Now Mr Zech says that advice is turning partly towards forecasts for the development of the industry and the challenges ahead. "There has been a big increase in the number of visitors we're seeing here," he says.

Many of the arrivals are from abroad — illustrating the desire of some foreign insurers to gain more information about the German market, and in time perhaps even a foothold.

Among the recent additions to the Cologne Re's branch network is a new office in Manila. Caracas is another possibility, says Mr Zech, while the company is also thinking hard about Bangkok. Meanwhile, both the quality and size of the staff are being raised, with an increase of over 20 per cent in staff numbers in the company's existing offices alone.

Domestically, Cologne Re is already taking steps to improve and structure the advice it offers, whether on difficult risks or the market in general. Improved computers and data processing should offer better service, while tackling an inevitable rise in its cost ratio. The aim is to deepen its areas of reinsurance expertise, while broadening into fields like credit and aviation.

Mr Zech thinks reinsurance will become more complex in future as risks grow both bigger and harder to assess. Product liability and pollution are just two examples that he cites. Cologne Re wants to have the right staff and systems on hand to tackle what will be increasingly tricky underwriting decisions.

Perhaps reflecting his earlier background as a senior consultant at McKinseys, it is also putting its advisory services on a more structured footing. It has just set up a consulting arm, which will be responsible for advising primary insurers on both difficult risks and market developments in general.

Mr Zech denies any conflict of interest in advising primary insurers — which might have competing ambitions — on how to prepare themselves for 1992. "Being an information agent is part of our role as an international reinsurer," he says.

Haig Simonian

Rules may alter

Continued from page 4

permits the non-insurer parent corporation of a ceding insurer domiciled in the state to provide the ceding insurer with funds in lieu of funding to be provided by unauthorised reinsurers. However, such funds have to be held subject to withdrawals by and under the control of the ceding insurer, and the transaction must have the prior approval of the New York State Insurance Superintendent.

In proposing to require recognition of overdue reinsurance recoverables, US insurance regulators are making an admirable effort to obtain more accurate statutory financial statements from the property/casualty insurers under their regulatory jurisdiction. It is not clear, however, that they have fully taken into account the potentially far-reaching consequences that adoption of their proposed accounting change may have on the cost of reinsurance and the competitive relationship between authorised and unauthorised reinsurers.

The author is a lawyer with Debevoise & Plimpton, New York

Phil Gunson talks to Robin Jackson, the Lloyd's underwriter

'A catastrophe market now'

IN THE 1960s, when Robin Jackson was an underwriter with General Reinsurance in New York, the attitude to reinsurance was, he says, markedly different from that of today.

Insurers would buy reinsurance "on a partnership basis, to allow them to write larger lines with a reinsurance partner, or new classes of business". The aim was the "levelling out of results to mutual benefit over a number of years". No longer can that be relied on, Jackson says.

Now on the verge of retirement as the Merrett group's active underwriter for Lloyd's non-marine syndicate 799, he observes, with a rather jaundiced eye what he sees as the decline in both morality and underwriting standards in the market. "Those of us who lived through the early 1980s and saw the stupidity that went on have obviously become a bit disillusioned," he says.

Few would dispute that the stupidity reached its peak in the late early 1980s, when it seemed as if "people were buying reinsurance to stay in business at cheaper rates on the back of the reinsurers." The latter, more often than not, were new players, keen to write as much business as possible, in order to maximise their premium intake at a time of record interest rates.

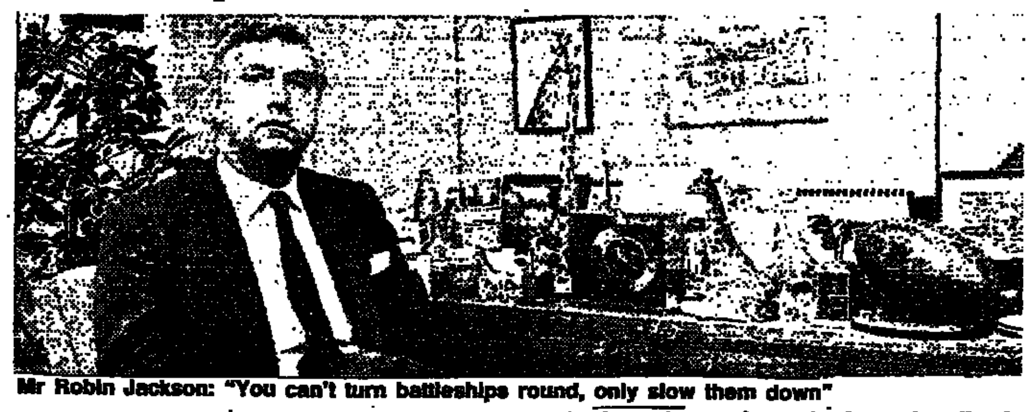
"Reinsurers," says Jackson, "became almost givers-away of their surplus and capacity, to enable other people to go out and do silly things."

Jackson is cautiously optimistic, however, about the current cycle. So far, reinsurers have generally refrained from chasing primary rates downwards as the market softens. Not only are interest rates unlikely to reach former levels, he believes, but also "there is not a great, overwhelming desire of people with capital to pump it into reinsurance [and] that, I believe will keep the reinsurance market much tighter."

Retention by primary insurers is up, and the tendency of reinsurance premium globally to represent a smaller slice of the market will, he feels, persist. The future will see further "rationalisation" of the market into fewer, bigger companies with less need to reinsure. "They will continue to buy reinsurance for catastrophe business, but why would they need to buy it on a [daily] basis when they're so much bigger than the reinsurers?"

That tendency towards rationalisation will be accelerated by the free market in large commercial risk insurance in the EEC, due to be introduced in the early 1990s. Whatever the remaining uncertainties associated with that move (and they are many), it is clear that fewer, larger companies will eventually be the order of the day.

Lloyd's itself, in which Jackson has been involved since



Mr Robin Jackson: "You can't turn battleships round, only slow them down"

1976, has, he says, "become more of a catastrophe market". The horrors of US liability claims in recent years have meant that "on the casualty side there's not much of a market for low-level US liability business by way of reinsurance." The chances that reform of the US tort system will bring substantial relief in the foreseeable future are poor, he believes. "I don't think you can turn battleships round — all you can do is slow them down."

The greatest fear is of inadvertently participating in something akin to the asbestos claims nightmare of recent years.

Among the likeliest candidates for a re-run of asbestosis is the burgeoning environmental pollution issue where, ironically, the insurers tend to be the same. The cost of cleaning up known toxic waste sites in the US has been estimated at more than \$100bn, but court rulings have given no clear idea as to how much of this will have to be paid by insurers.

"There are indications," says Jackson, "that insurers will do better than they did with asbestos."

Another possible sign may be the trend among reinsurers towards the writing of more facultative business, rather than proportional treaty reinsurance. The success of Jackson's former employers, General Re, is due primarily, he feels, to its concentration on facultative risks. This eliminates the dependence of the reinsurer on underwriting judgments by primary carriers.

"Treaty reinsurance underwriters, and the ceding underwriters, ended up mixing the high hazard with the low and medium hazard business, and the whole thing got out of kilter," Jackson says. "You could argue that the reinsurance market will look better over the next few years, because it will have a more controlled book of business."

Putting its money where its mouth is, syndicate 799 (due to be split into three next year) writes only 35 per cent treaty reinsurance.

REINSURANCE 6

While reassurers are less perturbed by Aids than they were a year ago, many problems remain to be solved, says **Eric Short**

Actuaries hope to receive guidelines on reserves

LIFE REASSURERS in the UK are now a little more relaxed over the problems caused by Aids (Acquired Immune Deficiency Syndrome) than they were 12 months ago.

The numbers of death and disability claims arising from the disease is increasing, but very slowly. Contrary to the predictions of some market analysts, life companies and their reassurers have not been swamped with Aids-related losses.

More important still, life companies have reacted to the problem posed by the disease "faster and more heavily than a year ago", according to Mike Brown, chief actuary of Mercantile and General Reinsurance.

UK life companies were given early warning of the onset of Aids by the adverse experience of US life companies. Yet it was the life reassurers who stood to suffer most – because they act solely as risk carriers, and lack the vast savings and investment business which cushions primary life insurers. But, ironically, all too often the reassurers have to follow underwriting and pricing fashions set by the direct market.

So, for reasons of self-preservation, the reassurers assumed the role of gathering and disseminating information on Aids so that life company underwriters could appreciate the extent of the problem they faced.

Next, the reassurers set out to persuade life company underwriters to toughen up underwriting procedures: they led the way in introducing supplementary questionnaires on proposals from single men, designed to show whether the buyer's lifestyle had high-risk characteristics, such as promiscuous homosexuality or intravenous drug abuse. The reassurers also urged life companies to apply to single men automatic testing of blood for the Aids-related HIV virus.

Finally, reassurers encouraged life companies to reassess premium rates and policy terms, particularly on pure risk contracts – term assurance and PHI (permanent health insurance).

This time last year, life companies had started to tighten up their underwriting standards, though not as rapidly or as stringently as reassurers would have liked. But although there was plenty of talk from the life companies there was no evidence of premium rate increases or changes to policy conditions.

Twelve months on, the scene has changed dramatically.

First, the Institute of Actuaries Working Party on Aids published its Bulletin No 2, which gave life company actuaries a basis for increasing premiums rates, because it contained a series of Aids death projections prepared by David Wilkie, a research partner with R.Watson and Sons, the UK's largest firm of consulting actuaries.

Wilkie himself makes no attempt to hide the underlying speculative nature of these tables, but they were swiftly used by actuaries as a basis for reassessing premium rates and setting up reserves against possible future Aids claims.

As a result, term assurance rates for men under 45 have been increased, by as much as 150 per cent. Desmond Le Grys, appointed actuary of Munich Re's UK long-term reassurance operations, now considers them to be closer to realistic levels – and reassurers, too, are now getting the required higher premiums on their life business. In addition, life companies have at last adopted the strict level of underwriting that reassurers were seeking.

On PHI, the life companies have adopted a different approach – though, again, they have followed the lead suggested by their reassurers – by excluding disability arising from Aids, or Aids-related conditions, from the cover provided by a PHI contract.

On group PHI for companies, the main contracts in which reassurers are involved, the life companies are offering existing clients the choice of Aids exclusions or dramatically increased premiums, based on the tables contained in the recently published Bulletin No 3 from the Institute of Actuaries Working Party.

The problem posed by Aids for PHI is that a man becoming HIV-positive could live another 20 years. The danger is that such a person could retire on medical grounds secure in the knowledge that the life company would provide an income through a PHI contract.

This is not possible if Aids-related illnesses are excluded from the PHI policy – though life companies may still have problems with claims developing on existing individual PHI contracts where rates are guaranteed.

The situation has also had the effect of giving life companies the opportunity to increase their PHI rates – rates that had been far too low to meet the cost of rising numbers of claims, even without the new threat posed by Aids. Life companies operating in the PHI market had, in fact, been accumulating losses since the early 1980s without taking any action.

Le Grys says he had been pressuring life companies for the past five years to put up their PHI rates. He says his own PHI reassurance book is just in balance, thanks to hard work and a tough attitude in refusing business on too low rates. Only the arrival of Aids turned the market, leading to rate increases of up to 100 per cent in the last year.

However, while reassurers are less perturbed by Aids than they were 12 months ago, there are still many problems to be resolved. In particular, there is the growing antipathy between life companies and doctors over the conduct of Aids testing and the disclosure of results.

The British Medical Association is warning doctors not to send Aids test results direct to life companies. Its reasoning is that potential sufferers could suffer severe emotional damage if they learn that they were exposed to the Aids virus from a life company rather than from a medical practitioner.

The other problem facing reassurers is the difficulty of determining the size of the reserves required to cover future Aids claims.

As yet, there is no statutory requirement for such a reserve, but the Government Actuary's Department has given strong indications that it expects appointed actuaries to make prudent provision. Mercantile and General, for instance, set up a £60m Aids-related reserve in 1987. As a UK-based reinsurer, it needs to adopt this sort of approach, to satisfy the expectations of the Government Actuary and the Department of Trade and Industry.

Most other reassurers, however, are subsidiaries of giant multinational reinsurance groups – and many would prefer to hold such reserves centrally against Aids risks on their worldwide business. This is certainly the policy of Munich Re, for instance.

Now, the UK's life assurance industry is hoping that, by this time next year, the Government Actuary will have resolved some of the uncertainty by issuing – either formally or informally – some more specific guidelines on how it expects actuaries to respond to Aids when calculating their need for reserves.

Philip Harverson considers the consequences of the collapse of the Asbestos Claims Facility

New body promises greater efficiency

THE COLLAPSE last November of the Asbestos Claims Facility (ACF) in the US represents a major setback to the insurance industry – and, by implication, to reinsurers too.

The hopes of asbestos producers and their insurers, to develop a joint approach to the settlement of claims brought by the victims of asbestos-related injuries and diseases, may be dashed by the break-down of the ACF.

The disappearance of the facility – established in June 1985, to curb crippling legal costs, present a joint defence against claimants, and provide a pool of funds to settle successful claims – could leave producers naked of insurance cover, and insurers and reinsurers facing million-dollar claims (and the incumbent legal costs) on their own.

Just two and a half years after its formation, the ACF has collapsed because its members – 34 asbestos producers and 16 insurers – could not agree on how the facility should be run, and crucially, how the liability of each individual member should be allocated. The differences first surfaced in May 1987; and after months of argument, seven of the largest producers withdrew their support, leaving the remaining members with no option last November but to vote that the facility be wound up on October 3 this year.

Mr Robin Jackson, a Lloyd's underwriter and chairman of the London Asbestos Working Party – which keeps insurers in the City up to date on developments in the asbestos saga – is dismayed at the collapse of the ACF. "Although it was inevitable, it is very disappointing because, after many teething problems, the facility was starting to perform well, and legal costs were being significantly reduced."

The facts support his case. Before the ACF was formed, figures showed that producers were winning only 28 per cent of the cases they fought, and the average settlement cost was $600,000. Since the facility was set up, 65 per cent of producers have won in court, while settlement costs have nearly halved to an average of $330,000. And for the first time in the facility's history, the number of claims settled every month was equalling the number of new claims filed.

Yet Mr Jackson admits the differences between producers over how to settle claims were becoming too great. "There were those willing to deal with claims reasonably, and settle them fairly quickly. And there were one or two producers who were running out of insurance coverage and who wanted to hang on to their money as long as possible."

Although, in the end, only seven producers were in dispute, the facility had to be dissolved, because the seven were some of the ACF's largest members. As Jackson says: "Any club cannot continue to operate if some of its most important members do not want to participate."

Another factor in the break-down of the ACF was the way the facility divided claim payments between its members. The share of liability carried by each producer depended on the history of claims made against that producer over a set period. If the number of claims suddenly increased dramatically, however, the share of liability could only be raised by a set amount – 15 per cent after the first year, and a maximum of 15 per cent every three years thereafter.

This led to accusations that some producers were escaping paying their fair share of settlements, because the system was not flexible enough to adapt to large changes in the frequency and size of claims filed against producers. A member of the ACF could, therefore, be facing large increases in the number of claims filed against it, but end up paying out less proportionately because of the limit placed on its share of total liability.

The facility was also slow to react to changes in the type of claims being filed. When the ACF was set up, the producers facing the most claims were primarily from the construction and shipbuilding industries, where asbestos has been part of the production process since before the second world war. However, in recent years more claims have been filed by workers in newer industries. Thus the allocation of liability was being complicated by the arrival of new sources of asbestos-related claims.

Perhaps, with such problems, the failure of the ACF to co-ordinate its approach was understandable. Yet the concept of a joint approach to asbestos claims has not been wholly discarded. Almost as soon as the vote to disband the ACF was taken, Mr Lawrence Fitzpatrick, the ACF's acting chief executive officer, began to work on establishing a new facility.

At least 29 of the original 37 producer-members of the soon-to-be-extinct ACF have already pledged their support to the planned facility, provisionally named the Centre for Claims Resolution (CCR). All 16 of the original insurers are said to be interested. Mr Fitzpatrick's team has already completed its first draft proposals, which Mr Robin Jackson and other insurers are studying carefully. They hope to have their response ready by the beginning of September.

The early indications are that the CCR should be a more efficient, potentially less divisive body than its predecessor. Mr Fitzpatrick's team claims to have drawn up plans which allow for flexibility in the allocation of liability, and which establish a claims-handling philosophy that should be acceptable to all members.

The new facility will also be run differently. Instead of the one-member one-vote system of old – where small producers had the same voting rights as larger producers – votes will be weighted according to each producer's share of liability.

Supporters of the new facility also hope that co-operation will be forthcoming from the trust set up by the bankrupt Manville Corporation, once the biggest asbestos manufacturer in the US. The trust has about $750m at its disposal to pay asbestos claims, and some of that money may be made available to the CCR.

If the CCR is accepted by enough producers and insurers, it could be up and running in time for October 3, when the ACF finally expires. It will also have a head start over its ill-fated predecessor. The rate of new claims being filed every month has dropped from its 1987 peak of 3,000, to about 1,500 every four weeks, and the size of settlements are also falling because the injuries of workers claiming now appear less damaging than those of workers who first filed against asbestos producers in the late 1970's.

Despite the collapse of the ACF, Mr Robin Jackson remains relatively optimistic about the future. Producers and insurers know that it is in their interests to pool their resources and co-operate. There is, though, one dark cloud looming on the insurance industry's horizon – property damage claims.

In the past two years, claims brought against producers for damage to land and buildings have escalated dramatically. Although the legal arguments surrounding property claims are less clear cut than liability claims – which means producers tend to win more court cases – insurers still fear that the damage inflicted by property claims could prove as crippling as that inflicted by liability claims.

FTBI INSURANCE GROUP EXPANDS

THREE PUBLICATIONS are now available from Financial Times Business Information Insurance Group. The long-established World Insurance Report newsletter, regarded throughout the industry as the leader in its field, is now joined by the fortnightly World Loss Report and the monthly World Policy Guide. Together, they provide a specialist news reporting service designed to keep insurance market executives abreast of industry trends. They cover all sectors of the profession, from international country reports to clause-by-clause analysis and comparison of London market policy wordings.

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SECTION III

FINANCIAL TIMES

SURVEY

New technology is revolutionising the printing industry, for the equipment manufacturers and users alike. Furthermore, market leaders in the graphic arts industry in West Germany, the US, Britain and Japan are finding no shortage of investors.

Innovation abounds

PRINTING is no longer a mysterious craft, restricted to the initiated few. Equipped with word processors and pagination software, office staff and publicity people can now produce their own laser-printed documents in a variety of typefaces.

Technological changes are sweeping through the printing industry at all levels, bringing new areas of growth, particularly for export-orientated equipment-makers in West Germany, the US, Britain, Switzerland and Japan. The UK's printing equipment sector, for example, has seen three consecutive years of increased manufacturing output - averaging 15 per cent per annum.

Meanwhile, sales of printed goods in the UK are set to reach $6bn this year - "these are among the more obvious signs that the printing business is booming," says a spokesman for this year's IPEX show, the international graphic arts exhibition at *Britain's National Exhibition Centre, near Birmingham*.

More than 100,000 visitors are expected at the overflow event - the biggest trade show ever held in Britain, with 1,500 exhibitors filling the NEC complex. Sales arising from this year's event (September 6-14) could top £850m.

Printing Technology

THE IMPACT of new technology is bringing radical changes to the printing, publishing and related communications industries.

As a result, users and manufacturers are needing to identify where the *thrust of this change will be greatest* and how it will affect their business. Among them are the advertising, magazine, newspaper and book industries, as well as the repro sector, commercial printers, print-finishing and converting sectors.

The move to all forms of type composition, page-layout and even colour systems away from specialised computer hardware to off-the-shelf mainstream computer products is also compelling manufacturers to take a long, hard look at their pre-press products.

This development, labelled 'Fourth Wave Technology' by the *Seybold Report* – the technical newsletter for the pre-press industry – has introduced new low-cost levels for systems that would have been impossible only a year ago.

"It means that newspapers, for example, will not buy a system from a manufacturer unless there is a commitment to standard PCs," comments Clive Goodacre, editor of the *World Graphic Arts Directory*.

The catalyst of this 'Fourth Wave' technology was undoubtedly the personal computer which has done so much to erase the mystique surrounding the manipulation of pictures and text-processing. Even as recently as five years ago, few people were able to see that a dedicated terminal would be as obsolete as the compositor's stick by the end of the decade.

A full contents list for this survey appears on page three

The newspaper industry, with its growing demands for totally-integrated colour pre-press systems, is also a driving force for technological change. (The colour illustration above includes part of the electronic control desk at the Financial Times' new plant at London's East India Dock).

In the UK, the printing industry is the eighth-largest business sector, with more than 9,000 commercial printers and 25,000 in-plant printers. Evidence of the industry's expansion is seen by insatiable demand for colour from the magazine and catalogue sectors.

This year, in the UK alone, orders for 25 web-offset presses – worth, in all, around £70m – have already been ordered.

The next revolution in web-offset printing will be in robotics at both ends of the press – for feeding in paper reels at one end and collecting finished products at the other.

The printing industry's track record in the application of new technology

Continued on Page 3

There is optimism in many parts of the industry, reports **Raymond Snoddy**

An era of dramatic change

THE PRINTING industry is big business and getting bigger. In the UK alone, the sales of printed goods this year are likely to top £6bn for the first time and printing is in the top ten league of manufacturing industries.

Last year in the US, the value of all products in the publishing and printing industries topped $129bn and the sector — with more than 53,000 companies — ranked as the sixth largest employer in American manufacturing.

A mood of optimism can be felt across many parts of the industry as it becomes increasingly clear that paper and ink are not about to go out of fashion and be replaced by newer electronic forms of communication, in any forseeable future.

An industry that a few years ago had perhaps a rather grubby, old-fashioned image, lacking the glamour of aerospace, television production or computers, has now reason for pride of its own.

Right across the industry new technology is transforming the production process and improving quality, with new magazines being launched and more newspapers making the transition to colour. The most dramatic changes have come in the pre-press area, where the text, photographs and graphics are prepared for printing.

There has been a widespread introduction of computer systems, both large integrated systems and increasingly the use of standard personal computers combined with standard software — usually referred to as desktop publishing, (DTP).

Systems are available for the grandest and some of the most humble locations.

In July, Atex, one of the majors in the electronic pre-press industry, announced the signing of a $22m deal with the New York Times to integrate all the newspaper's pre-press operations, using IBM hardware.

"In a few years from a technical viewpoint, we'll be running a network of nearly 1,400 workstations of varying horsepower and functionality and outputting the entire New York Times ready for the pressroom," says Ms Elise Rose, a senior vice president of the company.

At the other end of the scale, Press Computer Systems of the UK are unveiling at Ipex 88, at the National Exhibition Centre, an off-the-shelf package for small publications, for £51,000. It includes a fully integrated system complete with central processing unit, software, printer and ten terminals.

The move towards standard software and hardware is also opening up the printing industry to new entrants.

One of the latest to migrate from the computer industry is Cambridge Computer Graphics, a company with an established base in the CAD (computer-aided design) industry which has produced a colour corporate image publishing system which will run on IBM-compatible micro-computers.

Although the changes have been most dramatic in the pre-press area, including everything from typesetting to graphics manipulation, electronics have also become increasingly important in the control of modern printing presses. Computers now control the pre-setting of ink levels and also monitor performance during the process of printing to maintain overall quality and cut waste.

Yet, despite the obvious rapid rate of change, Mr Michael Hancock, director of the Printing and Information Technology Division of Pira, the printing, packaging and paper research body, believes that automation still has a long way to go in the industry.

The main problem facing the industry, he believes, is not the technology itself but how it is to be managed and used effectively and the fact that different people with different skills are now required for that task.

A shortage of people with the right computer-based skills is seen as being inevitable unless greater efforts and resources are devoted to training in information technology. Groups such as the Printing Equipment Educational Trust in the UK are also seeking to raise cash to re-equip colleges, *(see page 10)*.

Changes in technology have dramatically changed both relationships and industrial relations in the industry. With increasing sophistication, more control tends to go to the originator of a piece of work sometimes leaving less added value for the conventional printer.

Margins can be squeezed when a printer is presented only with computer discs or plates ready for printing, compared with the old days when work would be re-keyed. The growth of corporate publishing demonstrates how the process can go full circle with large companies deciding to take full in-house responsibility for all their publishing needs.

Despite the drama of industrial relations in what was Fleet Street and Mr Rupert Murdoch's transfer of his *national titles to Wapping, the* paper, print and publishing industries have overall been among the most peaceful and an orderly system of national agreements has survived.

The UK industry has shown real productivity increases averaging 7 per cent a year since 1980. Furthermore, orders lost to overseas competitors, when the British industry was seen as a sick man of the European printing industry, are starting to be won back.

Perhaps the most obvious symbols of investment and new technology *can be seen in* London's Docklands. There, many of Britain's national newspapers, including the Financial Times, have built up-to-the minute printing plants with computer-controlled presses all with sophisticated colour capacity — part of the £1bn investment, including redundancy payments, which the national newspaper industry has made in the future.

But they can also be seen in the restless overseas expansion of companies such as Mr Robert Maxwell's BPCC which has bought its way within less than two years to second place in the US contract printing market and the leading printer of Sunday magazines in the US.

According to Papis, the Wimbledon-based printing and publishing consultants, the level of confidence from printers and print-buyers has remained high over the past year with more than 55 per cent of companies expecting improved prospects.

The consultants are forecasting growth across all the main sectors of the print market from business forms and labels to books and magazines. The highest rate of growth — 10 per cent — is expected for commercial printing with direct mail buoyant and short-run catalogues for the specialist market still expanding.

In the UK there has been a dramatic concentration of power in the hands of the big players through acquisition — printers who have the financial muscle to invest in the latest technology and to concentrate in a single product at a particular site.

While there will always be a place for small companies occupying niche markets, industry specialists fear there will be a growing squeeze on *medium-sized companies with* a turnover of perhaps £2m a year.

It is not only Mr Maxwell who has been on the acquisition trail. For example, St Ives, a company which last year had sales of £96m and is now the second largest in the UK, has made four major acquisitions, in particular the purchase of Burrups from United Newspapers.

Some analysts forsee that the bulk of the printing industry could end up in the hands of 10 major players.

The move towards large international corporations will be further encouraged by the growth in satellite and facsimile transmission.

Yet the future of the printing industry looks far from monolithic. There seems to be ample room for a variety of different technologies and processes aimed at their appropriate *markets*.

The death of the small printing press sector has, for instance, long been forecast in the face of the advance of photo-copiers and more recently the arrival of desktop publishing. The small printing press sector has, however, stubbornly refused to die and press manufacturers report an annual market for more than 3,000 machines a year in the UK alone.

They argue that small presses are cheaper than photo-copiers on print-runs above 50-100 copies and that laser printers and desktop publishing (DTP) systems are still no substitute for traditional offset presses, in terms of quality.

While arguments over quality continue, what is not in dispute is that the combination of powerful microprocessors computers, high resolution graphics screens and laser printers allows sub-editing and page make-up on inexpensive personal computers, such as the Apple Macintosh.

Mr Eddie Shah, founder of the Today newspaper, plans to launch his news popular newspaper The Post with networked Apple Macs later this autumn, *(see page ten)*.

Supporters of desktop publishing claim that anything from a simple newsletter to a full colour magazine can now be prepared on such systems.

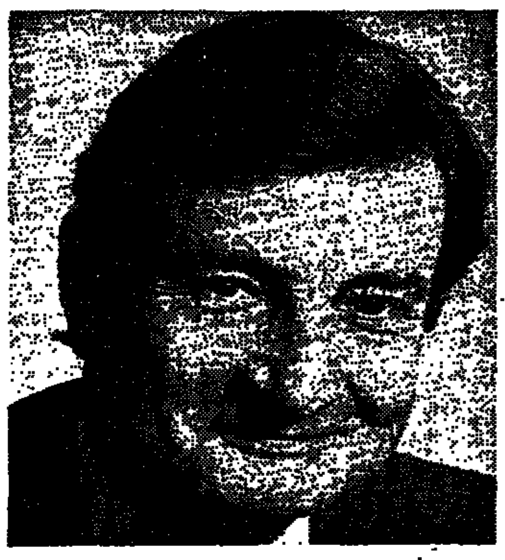
Some experts complain, however, that the supporters of DTP have raised expectations too high and that the resulting *disappointment is* one of the reasons why corporate or in-house publishing has taken off much more slowly in Europe than in the US where the market is estimated to be worth $500m a year and growing at an annual rate of between 20 to 30 per cent.

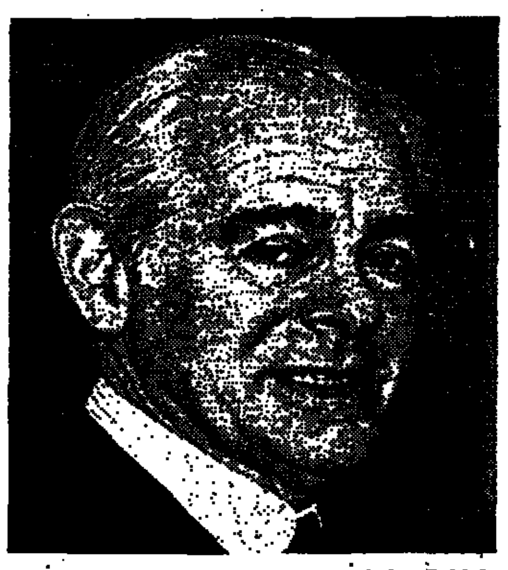
Those who have installed corporate publishing systems have tended to be restricted to large organisations in the petrochemical and aerospace industries which have used their own internal systems to produce such items as technical manuals and sales literature.

The overall growth in printing, by whatever method the image is transferred to paper, has ensured a strong market for printing equipment manufacturers, particularly in West Germany.

The West Germans claim to dominate the world printing equipment industry, with sales last year worth DM 5.5bn ($3bn), 76 per cent of which was exported.

The value of printing equipment manufactured in the UK is now worth £800m a year, two-thirds of which is exported, according to the British Federation of Printing Machinery and Supplies.





Confident about the prospects for the industry: Michael Leggatt, left, chairman of the British Federation of Printing Machinery and Supplies (BFPMS), sponsors of IPEX 88, the biggest trade show ever held in the UK; and, right, Lord Rodney, chairman of the Printing Equipment Educational Trust.

West Germany continues to dominate much of the printing equipment industry

International leader

FIVE CENTURIES after Johann Gutenberg invented movable type, printed his famous version of the Bible in Mainz, and took the printed word out of the dark ages, West Germany dominates the world printing equipment industry. Not only is the biggest printing machinery-maker German, but so also are the second biggest and the oldest.

As in other key engineering branches where Germany has a leading share, most of the output is exported. Last year, the German industry produced DM5.5bn ($3bn) worth of printing machinery, of which 76 per cent was sold abroad, the main *purchasing countries being the* US, Britain, France, Italy and Switzerland.

Some of the German industry's recent export successes have grabbed the headlines, notably the two deals landed by MAN Roland to supply the print empires of Mr Robert Maxwell and Mr Rupert Murdoch with high-capacity newspaper colour printing equipment worth DM450m and DM1bn (with options) respectively. The latter was the biggest ever contract in the world printing industry.

Despite its ability to land these two orders, MAN Roland is only the second biggest company in the German industry. But the biggest, Heidelberger Druckmaschinen (also widely known as Heidelberg), made news recently when it agreed to pay $300m for the Harris Graphics division (including its web offset business) of AM International, the US office equipment concern. Heidelberger Druck thus stole a march over Komori, its Japanese competitor, which had also been keen to buy Harris.

While the two big German companies are in strong competition with each other, though their product ranges differ considerably, both are coming under increasing pressure from Japan.

"Competition will undoubtedly become tougher," says Mr Helmut Wohland, the chief executive of MAN Roland. The *Japanese, he notes, used to* concentrate mainly on Asia and North America, but they are now carving out a bigger position in Europe.

Since Harris Graphics has a profitable plant in France, at Montataire near Paris, Heidelberger Druck was concerned to prevent Komori obtaining a production foothold in Europe by buying the US operation. The German company intends to modernise the French plant, as well as boosting Harris's exports from the US, where it has a share of around half of the commercial web offset market.

Although Heidelberger, with a turnover (excluding Harris's near $400m) of more than DM2bn which has doubled in five years, and MAN Roland, with some DM1.5bn, are far and away the leaders in the industry, there are several other big players in Germany.

The oldest printing press company in the world is Koenig & Bauer. It was formed in the early 19th century by Friedrich Koenig — on whose mechanical presses The Times newspaper was printed in London — and Andreas Bauer. *German companies also lead in* the pre-print sector, making equipment for photo-composition, filmsetting, and laser typesetting. Prominent here are Linotype and Compugraphics, part of Bayer chemicals.

Altogether, German producers accounted last year for 42 per cent of the total DM10bn of

Continued on Page 3

West German printing machinery exports

	DMm
US	721
UK	587
France	364
Italy	319
Switzerland	273
World Total	4,812

Includes composing & reproduction equipment (DM 631m of total)

Source: West German mechanical engineering industry association (VDMA)

Competition intensifies in the US printing industry

High cost of staying up to date

THE US printing industry has been enjoying favourable economic conditions in recent years, but there is still cause for some concern within the sector. New technology is impacting every facet of the industry and causing some fundamental changes in the way it does business.

The underlying goals of these changes are to return more control to print-buyers and to simplify or automate the printing process as much as possible to increase productivity and improve quality. Though some progress has been made, by and large, it has been a case of promises unrealised.

The undisputed king of US printing remains offset lithography. According to the Graphic Arts Technical Foundation, offset lithography accounts for more than 75 per cent of all printing based on value added to raw materials in the manufacturing process.

Based on US Department of Commerce estimates, the value of all products and services sold by the printing and publishing industry in the US totalled $129bn in 1987. Shipments are expected to be 3.2 per cent higher in 1988, adjusted for inflation, according to the department's Industrial Outlook 1988.

Printing and publishing ranks as the sixth largest employer in the US manufacturing sector, with more than 53,000 companies. Although small, family-owned operations constitute the bulk of this number, the US printing industry is dominated by a relatively small number of printing companies. RR Donnelley & Sons of Chicago, Illinois is the unchallenged leader, with $2.4bn in 1987 sales. The top five companies each had total sales of $1bn or more in 1987.

To talk of the US printing industry as a single entity is a misleading simplification. Just the above top-five printers include one book and magazine printer, two business forms printers and two greeting card companies. These five companies use a range of printing processes including offset lithography, flexography, letterpress and gravure.

The US Department of Commerce divides the printing industry down into 12 segments. Therefore, to examine the impact of technology on the US printing industry encompasses a considerable breadth of issues, with varying impact on the individual segments. There are, however, several developments receiving most of the attention.

As mentioned, much of the talk surrounding new developments has been promises for the future and not reality for today. Such is the case with the flexographic printing process.

Offset lithography grew to dominate the US printing industry because of its high quality and productivity. Since the process depends on chemical interactions and not just mechanical operations, it is considerably more complex and requires greater skill to operate.

Flexography offers the simplicity of raised image printing and the vibrant colours of water-based inks, but it also has a number of significant drawbacks. The most serious problem is that flexography cannot produce images with a resolution as high as other printing processes. Its images are not as crisp.

There are a number of other problems with the process, too, including higher cost plate materials and some difficulties with inks. Nevertheless, flexography's potential advantages have spurred the investment of a great deal of time and money by a large number to suppliers and printers to overcome its limits.

If flexography ever achieves a quality level competitive with lithography, it is expected to steal away a large share of the printing market because of its lower cost, ease of use, colour quality and reduced environmental impact. To date, outside of packaging applications, flexography has gained its greatest acceptance in the US newspaper printing segment, due to the lower quality demands of many newspapers.

Equipment manufacturers have been able to capitalise on the current rush to print newspapers in colour by offering flexography as a lower-cost alternative to multicolour offset lithography presses. Since buying colour presses means a change in technology for newspapers anyway, the industry has seemed more willing to try out this newcomer.

While the list of newspapers in the US printed by flexography continues to grow (some 30 newspaper titles at present), others have tried it and decided to stick with lithography. The process has gained little acceptance outside of the newspaper industry, except for a few printers producing some lower quality advertising inserts and directories. Still, the sheer magnitude of the development effort and the level of interest in the prices have many industry experts optimistic about flexography's future.

One possible glimpse of the future was provided by the Flexographic Technical Association (FTA). The association produces a four-colour magazine for its members called Flexo. Last year, the FTA in conjunction with Greater Buffalo Press of New York and several flexographic equipment companies tested the viability of printing a four-colour magazine via flexography.

A four-colour, 32-page Flexo signature on coated paper was printed at Greater Buffalo and included in the April 1987 issue. The test was considered a success, but participants agreed that the process was not yet capable of printing this type of work on a production basis.

Picture by Terry Kirk

The Financial Times on sale in Manhattan, New York City, made possible through facsimile technology. International editions of the FT are also printed in West Germany and France.

Ever since USA Today revolutionised the newspaper industry by printing in four-colour processes, US newspapers of all sizes have followed suit. Emboldened by their success at printing their own products in colour, many newspapers publishers are trying to expand into a different market by using their new colour presses to print items for outside customers.

The industry has been most successful in using otherwise idle presses to print advertising inserts which the newspaper already have contracts to carry in their fold.

Although most people tend to think of printing in terms of the press room, it is in the pre-press arena where most of the developments have occurred of late. Colour electronic prepress systems (CEPS) revolutionised prepress operations by eliminating many manual operations and offering previously unavailable colour correction and image manipulation capabilities.

There is a down side to this technology, too. Most large colour trade shops and printers virtually were forced into installing $1m or more CEPS. Even if demand was not sufficient to justify adding this capability, customers threatened to take all their work to other shops with CEPS, based on the presumption that they would need this advanced capability on occasion.

The end result has been under utilisation of CEPS capability, with many shops allowing equipment to sit idle or using it to do simple tasks that cannot be justified on the basis of cost.

Some trade shops have turned to the skies for a solution to this problem – companies owning multiple colour houses are linking their shops via satellite. In this way, every location need not have a CEPS in-house to offer this capability and work loads can be more evenly distributed.

Eventually, these satellite networks could be used for beaming finished digital images directly to printers for plate-making and printing.

A number of trade shops are also experimenting with creating electronic links to their customers. Low cost electronic design systems have been introduced that can be interfaced to CEPS. Design systems typically produce a lower quality result and have only limited capability.

However, many trade shop customers can afford to bring this technology in-house because of its lower cost. Preliminary design work can be done on these systems and then transmitted to the trade shop for final image preparation on a CEPS.

Developments in the United States Design systems can also be used as remote proofing stations for work done at the trade shop. Trade shops can all but lock in their customers by setting up these links, and some even sell the design systems.

Despite much hype and some hysteria, the wonder technology of desktop, or electronic publishing and printing, has had little impact on the US printing industry. Print-buyers being able to produce images on a personal computer and output final printed pieces on a laser printer was considered by some to be obsolete traditional printing processes.

At present, the resolution and productivity of desktop publishing systems are judged to be too low for most printing applications. The graphics creation capabilities of these systems have won many converts in newspaper and technical publishing applications, though, due to their lower quality demands.

Some type houses and printers are finding some success in selling installing and maintaining desktop systems for their customers. Again, this locks the customer into the type house or printer, which can use its costlier and more sophisticated equipment to improve the quality of their customers desktop output and reproduce it more efficiently.

There have also been a number of indirect impacts of technology on the US printing industry. The most significant is a fundamental change in the industry's approach to the business. Printing has generally been technology driven, rather than market-driven. Printers sought to buy the latest technology and then to sell this new capability to customers; the technology always came first.

Advancing technology has also bought ever-increasing purchase prices and has speeded-up equipment obsolescence.

Instead, printers are concentrating on finding niche markets were they can still afford to be the best at what they do. They are finding markets where they are not forced to compete head-to-head with large companies that can spend freely or foreign competitors who benefit from lower labour costs.

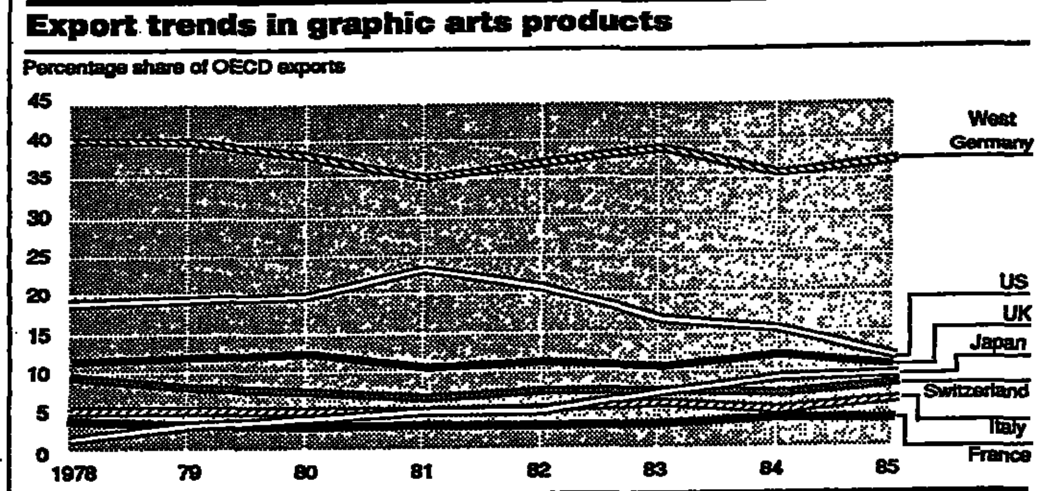
So far, technology cannot provide a solution to the industry's most serious problem: based on population demographics, the US printing industry is expected to face a critical shortage of trained and available labour in the 1990s. *Machines still cannot replace humans, and hopefully never will.*

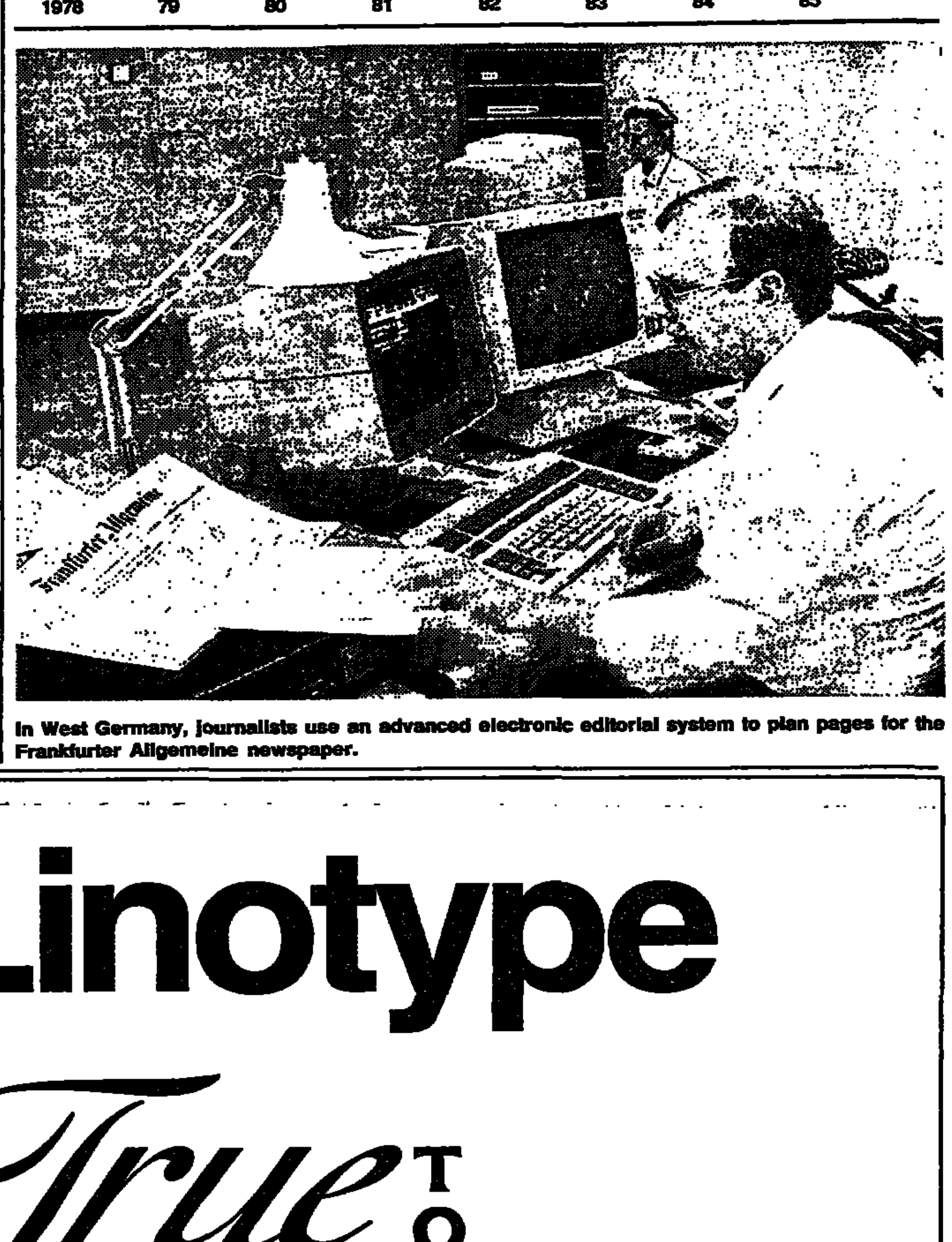
Mark D. Smith
Chicago

ON OTHER PAGES

Export trends in graphic arts products

Percentage share of OECD exports





In West Germany, journalists use an advanced electronic editorial system to plan pages for the Frankfurter Allgemeine newspaper.

Big boost for productivity

Continued from page 1

is probably unbeaten. For example, the demands of the industry for data transmission are far above other industrial requirements in terms of capacity, speed and error-correction.

Technology is bringing faster press speeds and rising productivity. Artificial intelligence in the pre-press field and automatic printing controls in areas such as inking are enhancing the output from web and sheet-fed machines.

The advent of desk-top publishing is also boosting the awareness of typography and layout in business communications. This, in turn, is raising standards in the presentation of business documents.

Specialist printing houses can now be linked together via digital communications to meet the highest demands of the advertising industry. Many of these latest innovations in the industry are being unveiled at IPEX 88, the international graphic arts exhibition, sponsored by the British Federation of Printing Machinery and Suppliers (BFPMS) at Britain's National Exhibition Centre, (September 6-14).

"Such is the speed of change that just when you think a new development isn't going to happen, that's usually when it does," comments one industry analyst.

Michael Wiltshire

West German export success

Continued from page 2

world printing machinery exports, according to the German mechanical engineering industry association (VDMA). The customers were spread throughout 160 countries – "there is hardly any country in which paper, paper products, and printed matter of all kinds are not produced on German machinery," says the VDMA proudly.

For as well as the printing machinery itself, German companies are also heavily involved in paper production and finishing machinery, with a production total of DM1.6bn in 1987, of which 68 per cent was exported. Output of paper converting machinery was at a similar level, with 92 per cent sold abroad. Here, too, the share of the world market is sizeable: Germany's foreign sales of paper production and finishing equipment made up 30 per cent of world exports, with a 37 per cent share in the converting field.

The success of German companies in the paper and printing machinery industries reflects their constant investment, innovation, and attention to service and training (both of employees and customers), qualities that characterise the country's leading exporters in all branches. Heidelberger Druck, for instance, moved into electronics very early. Its production activities thus stretch from the foundry all the way to the writing of software.

Heidelberger's prominence is based on sheet-fed machines, sold mostly to the small and medium-sized printing firms who have found business escalating in recent years as the so-called 'colour explosion' has burst through the industry.

It is also involved to a lesser *extent in web offset, with the* Harris Graphics purchase adding to its position here. At MAN Roland, production ranges from small sheet-fed offset machines to big magazine and newspaper presses of the type ordered by Mr Maxwell and Mr Murdoch.

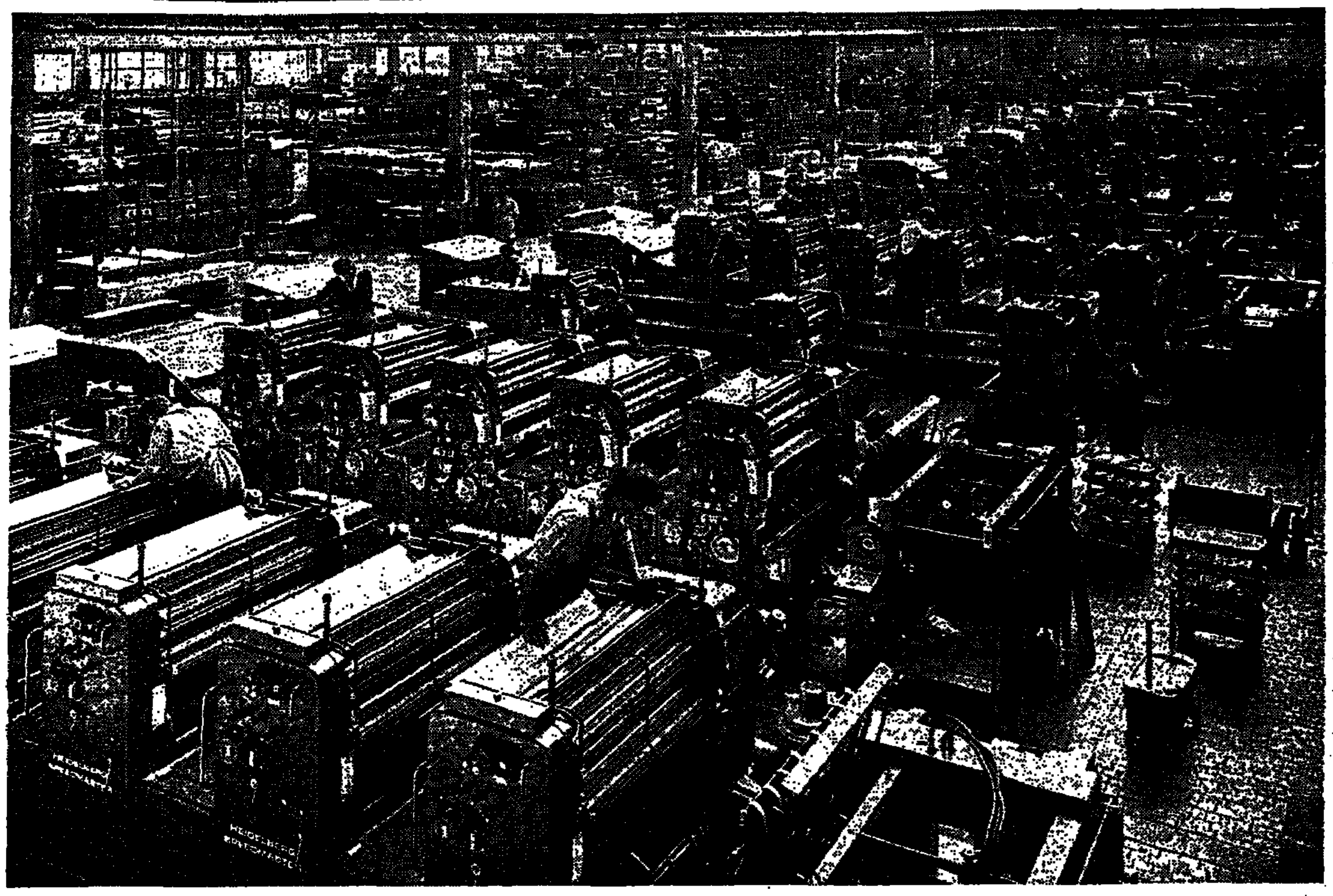
Koenig & Bauer, with a turnover of nearly DM500m, also counts large-scale international publishers among its customers. Mail Newspapers of the UK ordered eight big web-fed letterpress rotary machines last year, the last to be delivered this month. This followed successful contracts in the US with newspapers in Florida and Rhode Island. The Würzburg-based company also co-operates with Sumitomo of Japan's printing machinery division, which builds and sells rotary offset machines for the Japanese and Far Eastern markets.

As in other key engineering sectors like textile machinery, Germany has *managed to build* and keep its lead despite a steadily rising currency which has made exporting more costly, though the D-mark has eased this year. Since purchasers are obviously concerned to acquire the latest technology, German manufacturers have striven hard to modernise their products and their production methods and maintain their reputation for quality, reliability, and punctuality.

But their home market is also important, despite their heavy reliance on foreign sales. The colour explosion has affected Germany as well as other markets, and magazine, newspaper, and book publishing has grown enormously in a country which is one of the world's richest.

"Germany is still a growth market," says Mr Hilmar Dosch, finance director of Heidelberger Druck, with satisfaction. Even so, it is the foreign customers who make the running. The Gutenberg revolution *has become a* powerful economic as well as cultural factor.

Andrew Fisher



Heidelberger's turnover has doubled in the past five years

Andrew Fisher profiles Heidelberger Druck

Undisputed leader in the industry

WITH A turnover of more than DM2bn ($1.1bn), a West German labour force of 7,600 people, and a total of some 350,000 machines delivered to customers, Heidelberger Druckmaschinen is the undisputed leader of the world printing machinery industry.

Big though they are, its nearest competitors, MAN-Roland, also German, and Komori of Japan, are still a good deal smaller than Heidelberger Druck – widely known also as Heidelberg. Recently, it agreed with AM International, the US office equipment group, to buy the Harris Graphics division with its web offset business (Web Press).

Thus, at one stroke, Heidelberger Druck is adding about a third to its size, with Harris having a turnover of more than $350m. Through the deal, which is Heidelberger's first plant purchase outside its German base, the company is acquiring new capacity not only in the US and Mexico, but also in Europe, already its biggest market.

Heidelberger outbid Komori for Harris. The Japanese company was convinced that it would acquire the US company and thus obtain a strong production foothold in Europe with Harris's French plant at Montataire near Paris. Thus the German company has kept its main Japanese competitor at a distance through the planned purchase of Harris, while also gaining important new capacity across the Atlantic, where its second biggest market outside Germany lies.

"This is a big step for us," says Mr Hilmar Dosch, the finance director. "We know the US company's technology and its customers, so the deal will complement our existing programme very well."

Initially, Heidelberger will concentrate on increasing Harris's order book of around $300m, lifting its export business, especially in Europe and Asia, and smoothing out production problems at its new components plant in Dallas, Texas. It will also modernise the profitable French parts and assembly operation, which employs 700 people out of the total Harris labour force of 2,700.

The German company, founded in 1850, is predominantly in the sheet-fed offset business, so there will be little overlap with Web Press. More than 90 per cent of Heidelberger's turnover comes from highly flexible sheet-fed machines which run at a top speed of 11,000 prints an hour, or three sheets a second. For web offset machines, handling long print runs, speeds are much higher: 40,000 prints an hour, or 11 per second.

Thanks to the tremendous rise in the use of colour, Heidelberger's turnover has doubled in the past five years. Last year its net income jumped from DM184m to DM248m. Indirectly controlled by Rheinisch-Westfälisches Elektrizitätswerk (RWE), the big German utility, it currently invests around DM200m a year – the US deal is being financed internally – and sells in 130 countries. Every 10 minutes of every working day, a machine leaves the plant for delivery.

In addition to its German employees, the company can also call on some 4,000 technicians, engineers, and printing advisers at more than 200 service offices around the world. This is an essential back-up to its production and sales efforts, with a heavy emphasis also placed on training, both of employees and customers. The company has almost 600 apprentices, nearly 8 per cent of its German workforce, a high proportion even by the standards of such a training-conscious country as Germany.

Heidelberger Druck is not only the world's biggest company in the industry, but it also has the world's largest printing press factory, at Wiesloch near the Heidelberg headquarters. It also has a new DM400m, highly automated, plant at Amstetten near Stuttgart. Its control of the production process goes from the foundry to the software, with electronics playing a key role in the speed and flexibility of modern colour machines.

"We tried working with other software firms, but it was too slow and frustrating," says Mr Dosch. "So we did it ourselves." Heidelberger has a new DM60m electronics facility and turns out some 2m electronic components a year.

At its main plant in Wiesloch alone, it has more than 700 computer-controlled (CNC) machine tools. It makes most of the components for its printing presses and is thus more heavily integrated than most competitors. It buys in only around 30 per cent of its materials, while other big companies purchase more than 50 per cent.

How about the future? "If the world economy continues to grow, we shall grow too," comments Mr Horst Schlayer, the sales director. The whole printing industry, he notes, has become far more colour-oriented than it used to be, partly through the influence of colour television. Most of Heidelberger's customers are small and medium sized printing firms, in stiff competition with each other. It is not involved in high-circulation newspaper and magazine printing.

To stay in the race, its customers need the latest technology – "today the four-colour routine is not enough," adds Mr Schlayer. "Now, the equipment can handle six colours." There are other refinements, too, such as numbering, perforation, and the application of special coatings for advertising and promotional work. Altogether, some 65 per cent of the printing on Heidelberger's presses is linked to advertising or marketing in some way.

Nearly 80 per cent of its turnover is achieved abroad. After Germany and the US, its third most important market is the UK. It is also strong in Japan and the rest of Asia. With Harris Graphics, the German group will both enhance its position in North America – Harris has approximately half of the US commercial web offset equipment market – and be able to offset some of the impact of the strong D-mark on its web offset business, though this year has seen the German currency weaken against the dollar.

Heidelberger does not have any further acquisition plans for the moment, says Mr Dosch – "we have been cautious in the past and we will remain so in the future." But to keep up with the market, it will have to maintain its investment, research, and production pace. Printing companies used to keep their machines for up to 20 years. They still last that long, but are now usually replaced in half that time or even less.

Around 80 per cent of the world's 150,000 printing concerns employ 20 or fewer people and the pressures in the market are intense. Thus says Mr Schlayer: "We have got to modernise all the time."

MAN ROLAND

World record order

MAN Roland may be only the second biggest producer of printing machinery in West Germany and the world, but it has shot to prominence thanks to its two massive orders from Mr Robert Maxwell and Mr Rupert Murdoch, the international media barons, for high capacity colour newspaper printing equipment worth DM450m and around DM1bn.

While clearly appreciating the business, which it sees as a testament to its abilities in colour newspaper printing, the company is anxious to avoid the impression that it has become dependent on the two media magnates.

It emphasises that the orders – Mr Murdoch's for 39 Colorman presses, 220 roll changers and associated options was a world record for the print industry – have not distracted it from the needs of its thousands of smaller customers.

For MAN Roland has been around rather longer than either of its two biggest clients. It stems from a merger in 1979 between Roland Offsetmaschinenfabrik Faber & Schleicher, based in Offenbach near Frankfurt, and MAN Maschinenfabrik Augsburg-Nuernberg, based in Augsburg in Bavaria.

Despite their complicated names, the merger was in fact an ideal fit. For it combined the expertise in sheet-fed printing developed in Offenbach since 1871 with the roll-printing capabilities of the Augsburg works, established about two decades earlier.

As a result, MAN Roland now claims to have an almost unparalleled range of products from small sheet-fed machines for commercial printers to the massive three-and-four-storey high print mammoths ordered by the Anglo-Saxon press barons.

Together, that range has enabled the company, which employs 7,800 workers at its German plants as well as a further 1,500 abroad, to generate sales of DM1.25bn in its 1986-7 business year and after-tax profits of DM37.6m. Sales in the latest business year to end-June look set to reach DM1.6bn, while total orders are likely to be about DM2.39bn.

MAN Roland, as its name implies, is an independent subsidiary of the vast MAN conglomerate, itself a merger between two German engineering companies in 1986. But the company makes much of its links with its powerful parent. MAN Roland may be a famous name in printing, but is part of an outfit which is as well known for heavy vehicles, steel trading and diesel engines, as printing machines, to name but a few.

Hence, Mr Helmut Wohland, MAN Roland's chief executive, takes pains to stress the back-up available, be it technical or financial, to his company. After all, its biggest printing presses in particular are not short-term investments, and customers want to be reassured that the company will still be around years hence to look after their needs.

Thus customer training and after-sales service are among the themes he emphasises, as is the knowledge that MAN's engineering and financial muscle ultimately stands behind its printing equipment subsidiary.

"Being a subsidiary of the MAN group is very helpful to us, especially when it comes to increasing our room for manoeuvre in financing," he says.

But durability does not rule out the chance to change, he stresses. MAN Roland makes much of the fact that its machines – and especially the huge Colorman range ordered by Mr Murdoch and Mr Maxwell which reflect the increasing demand for colour in newspapers – are highly adaptable.

Thus, five years after commissioning its new presses, a newspaper may want to respond to changing market conditions by raising capacity or altering the configuration of its plant. "The flexibility and chances of expansion . . helps explain why we have now delivered over 150 Colorman plants around the world," says Mr Wohland.

Established contacts with newspaper proprietors has also played a part. Offset printing is now fast becoming the bread and butter of newspaper publishers around the world, who are replacing their older letterpress machines. But not all printing equipment manufacturers were as quick to grasp the importance of offset technology as MAN Roland, which has always had a substantial part of its business in this field.

Although the company as a whole can offer a range of offset, letterpress and gravure machines – the three key printing methods – offset accounts for some 95 per cent of group turnover now.

Good and long-established customer relations are another of the themes stressed by Mr Wohland. Relations with Mr Murdoch, for example, had been nurtured over many years from the days when his press empire covered only Australia.

However, MAN Roland presses are not only to be found at newspaper plants in the UK and Down Under. In Germany, readers of the popular mass-circulation Bild Zeitung also see the fruits of its technology, as do subscribers to the Sueddeutsche Zeitung, the quality Munich-based daily. Elsewhere in Europe, Holland's De Telegraaf and Le Figaro of France are also printed on MAN Roland presses. And the company has just won an order for presses for the Communist Party's youth newspaper in the Soviet Union.

Meanwhile, commercial printing on sheet-fed machines continues to thrive. Sheet-fed presses, which tend to cost up to DM4.5-5m – just where roll machines start – are predominantly used in the general printing and packaging industries thanks to their ability to handle paper of varying size and thickness. Thus while its spectacular newspaper presses may have captured the headlines, some DM450m of MAN Roland's DM700m investment programme to the early 1990s is to be spent on the Offenbach business against DM250m for roll presses in Augsburg.

The fact that there is now no big US producer of sheet-fed machines has given foreign groups a great advantage, and virtually all the sheet-fed presses now sold in the US now come from Europe or Japan.

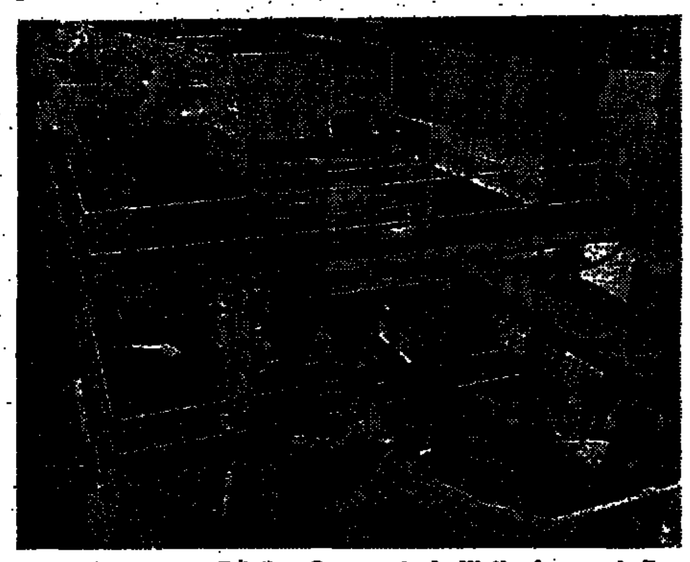
But the US market is not the only example of the increasingly tough battle being fought in printing equipment – whether roll or sheet-fed.

In the past, the contest was predominantly between German and US manufacturers. But in recent years, Japanese groups like Komori and Mitsubishi have been making their presence increasingly felt – "Japanese activity used to be directed to the Asian and north American markets, but it is now becoming stronger in Europe," admits Mr Wohland.

"In both sheet-fed and roll machines, Japanese competitors are using well-proven technology, much electronics, high automation and low prices to build up their market positions," he says.

"But in Europe, they are coming to a market characterised by demand for the highest printing quality and flexibility, and which requires manufacturers to have great know-how across the whole spectrum of process and plant technology. Competition livens up business – even ours."

Haig Simonian
Frankfurt



British Newspaper Printing Corporation's Watford press hall with its 12 MAN Colorman machines

AUTOMATION

Full automation predicted by mid-1990s

"IS it real – or is it Scitex?" asked Forbes magazine, the American fortnightly business journal. The question referred was to the amazing image manipulation now possible through pre-press electronic systems from companies such as Scitex.

The company, in common with its major rivals, such as Crosfield Electronics in Britain, or Hell in West Germany and Dainippon Screen in Japan, can now take any photographic picture and perfectly blend in features which an editor or advertiser might wish to present.

To illustrate how cleverly the facility can be applied, Forbes used image manipulation to create a "picture" of Colonel Oliver North in a US courtroom with President Reagan. As everyone knows, such a scene never happened, but image manipulation such as this is virtually undetectable, even, it is claimed, by forensic experts.

This question of some electronic image manipulation by the print media thus raises ethical issues. The makers of these front-end image-processing systems did not, of course, set out to forge pictures. Their aim was – and is – to provide a means of enhancing colour images, removing or retouching blemishes, as well as combining images and adding extra features.

Were it not for the wanderlust of some advertising executives and their clients, there is no longer any need to send out teams of photographers, technicians and models to South Pacific beaches or to hire stuntmen for 'still' pictures. Many requirements can instead be created in the studio, using stock pictures and image-processing equipment.

But in their eagerness to sell new electronic imaging systems to the graphic communications industries, some manufacturers have perhaps 'over-sold' the creative capabilities of new equipment.

The customers – the repro departments serving advertising agencies and the various colour supplements, for example - have tended, in turn, to over-promote the possibilities for picture changes, encouraging their clients to use these new facilities to excess.

The newspaper world, with the pressure of daily deadlines, has been less keen to experiment in these areas, especially since there is insufficient time to repeatedly change images and styles. Most newspapers work to broadly pre-determined page-layouts and designs.

Electronic pre-press and front-end systems are, of course, becoming universally accepted by the daily press. It is taking a long time, though, for electronic page layout as well as make-up to become practicable.

Even now, the experienced paste-up person can make page changes more quickly with scissors and adhesive than via computer screens and electronic page-composition systems.

In the early 1970s, however, some computer companies made it seem so easy that a newspaper of the future might even be organised from a deck-chair on a beach, with text and picture directions being sent via a computer to some distant press.

That vision was far-fetched but technologically, great advances have been made which go a long way in meeting the complexities of newspaper and magazine production.

For example, electronic text and imaging systems with direct data compression, makes it possible rapidly to transmit complete pages to other print plants, anywhere in the world.

Transmission problems have caused the majority of newspapers using page transmission to continue using film to record incoming pages before making plates from which to print – a pity this, but while more advanced technology exists, it takes time to perfect such systems.

Some larger European magazines already employ direct page transmission in rotogravure, where assembled colour and text pages can be linked to front-end systems to allow the electronic engraving of printing cylinders. There are also German and Japanese systems which allow direct offset plate-making on to cylinders within a printing press.

Some analysts predict that by the mid-1990s the "all-automatic" production of newspapers will have become feasible. Paper-handling is already virtually automatic, with robots taking reels of paper to presses and lifting them in for printing.

Pioneering systems in Japan by Asahi Shimbun and Dainippon Printing have impressed the world of printing. Now, many other manufacturers are following their lead.

In future systems, copies of newspapers will be removed automatically so that they can have inserts stuffed in by other automatic machines.

At the front end, electronic typesetting and page composition systems will be serviced by electronic still cameras, available from companies such as Canon, Fuji and Sony. The pictures thus taken can be sent directly over telephone lines from newspaper offices worldwide.

Laser printers capable of producing fine-resolution images will dispense with film; erasable laser disc storage, such as available from Dupont, Tandy and Sony, have impressive storage capacity and could be coupled to low-cost personal computers to bring about much-needed savings.

Laser exposure could go direct on to press cylinders, too. Films and plates in intermediary stages of production would no longer be needed.

As yet, however, most newspapers have found they prefer to work with film as a storage medium because it is easily checked, changed and updated.

All-electronic systems for printing mass-circulation newspapers and magazines will also demand highly skilled operatives to work them.

Bold experiments in the US at Newsweek magazine, for instance, where all colour pages were to be created in editorial offices in Manhattan have now given way to a more realistic approach. The equipment has been moved to an expert reproduction house, linked to the publisher via satellite transmission. From the repro house, satellite transmission sends complete pages to numerous remote printing centres.

Newspaper and magazine journalists on larger publications are continually needing to assimilate new production techniques available to them through advancing technology. Few editors or other journalists, however, would claim to be electronic wizards. That fact alone will probably delay the widespread total automation of newspaper printing.

Pincus Jasper

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PRINTING TECHNOLOGY 6

The FT's satellite receiver at Evergreen, New Jersey and, right, printing in Roubaix, near Lille

Della Bradshaw on industrial facsimile

Fax meets need for speed

WHEN President Reagan and Soviet Premier Mikhail Gorbachev bid farewell at the end of their meeting in Rekyavik, Iceland, the world's photographers were on hand. Just hours later the colour photograph of the handshake appeared in America's *Time* magazine.

The incident shows just how quickly newspapers and magazines need to act if they are to keep up with rival publications and media, such as television and radio. To meet those targets publishing houses around the world are installing industrial *facsimile (fax) machines*.

For several years desk-top fax machines, which transmit and receive text, photographs or diagrams over the ordinary telephone network, have provided one of the fastest-growing markets in office equipment.

Their industrial counterparts have also been in demand, particularly in the UK, as newspapers distribute their printing centres around the country.

Manufacturers estimate that the market for fax machines such as these has doubled over the past two years in Britain. In the rest of Europe, however, the uptake has been patchy. *This is because of the problems of getting digital transmission lines.*

Although sharing a name and a concept, the office desktop machine and the industrial fax machine have several basic technological differences. That is for two specific reasons: the industrial fax has to transmit a much higher print or picture resolution; and because it has *more information to send it* has to transmit it more quickly.

A desk-top fax machine uses a thermal print head to read the document, which means the very latest Group IV machines can read and transmit 200 lines by 400 lines of data per inch. An industrial fax machine uses a more sophisticated laser spot to scan across the page and for colour magazines, for example, scans 1,600 lines by 1,600 lines every inch. Over a whole page that adds up to 700m pixels, the individual picture elements. That is 32 times the amount of information sent over the most advanced desk-top machines.

Because speed is of the essence in transmitting pages, the ordinary telephone network is not suitable. Instead, publishing houses are investing in dedicated links between printing sites, using satellite and optical fibre transmission lines as well as the standard copper telephone cables.

Satellites need not only be used for international transmission. The Norwegian newspaper VG, for example, transmits data from its Oslo to its Trondheim office so the paper can be printed on two sites. The information is sent via a French satellite over the Congo.

The available transmission speed for both terrestrial and satellite links varies around the world, depending on the telecommunications operators. In the US the standard transmission rate is 1.544 Megabits of information per second (Mbit/s), and in the UK and many other places around the world it is 2Mbit/s. That means that it takes about three and a half minutes to transmit an ordinary broadsheet page of a newspaper.

To cut the transmission time down even further the fax manufacturers are incorporating compression techniques into their machines, which squeeze the bits of information *down the telephone line*. That cuts down the time it takes for the page to be sent from three and a half minutes to about 55 seconds.

But compression can introduce a further problem. As the information is compressed down the telephone line then reformatted at the other end there is a higher chance of errors creeping in. That is a particular problem where a fax is being 'broadcast' from one site to a number of other centres. To iron out that problem the manufacturers are building error correction techniques into the machines, which means that chunks of data can be re-sent if an error occurs.

Another concern for the industrial fax manufacturer is that newspapers need the flexibility to send and receive the data in different forms. Like the desk-top fax machine, the industrial fax can send information from a sheet of paper - which in publishing terms means a paste-up of a page - or it can transmit information from a computer disk. The printing house needs to receive the information either on a disk, a printing plate or film.

Although the desk-top fax market is dominated by Japanese companies, manufacture of industrial fax machines is international. Two Japanese manufacturers Matsushita Graphic Communications Systems and Ricoh are players in the industrial fax market, but other participants are the American company Chemco, the German company, Hell (which is an affiliate company of Siemens) and the UK company, Crosfield Electronics, which is part of the De La Rue conglomerate.

The main application for the industrial fax machine is in *transmitting pages for printing* remotely, either to contract printers or to overseas or geographically distant sites. The Financial Times, for example, sends information for its European edition from London to be printed in Frankfurt, Roubaix near Lille in France and Evergreen, New Jersey.

Lars Janneryd, Deputy Managing Director of Commercial Operations at Crosfield Electronics, also sees a role for the fax machine in changing the way newspapers operate. He quotes the example of a small provincial paper, Moss Avis, based 50 kilometres south of Oslo, in Norway – "the newspaper was being forced to close down because *it couldn't afford* to buy the new printing presses it needed. But instead it bought our Pagefax machine, *did the paste-up locally* and transmitted the paper to a contract printer for printing. So it was able to *stay in business*," he says.

Janneryd estimates that only about 20 per cent of the world's newspapers use fax technology for transmitting black-and-white pages. Nevertheless, he believes there is an even bigger market potential in colour fax transmission. For that, the fax machine has to transmit four different plates for every page.

One of the reason for the enormous growth potential is that it is not just the commercial publishing industry which needs to send colour photographs around the globe.

In the US, though not yet in Europe, companies in the graphics art industry are also taking up colour fax transmission as a way of sending colour photos around the country, which can then be used for advertising or illustrative purposes as well as newspaper or magazine publishing.

QUICK-PRINTING

Today's jobbing printers

THE HIGH street quick-printing industry was born two decades ago from the coming together of two separate technologies.

The first of these, the lithographic method of printing, is now the dominant process in the whole printing industry. With the arrival of all-electronic printing processes it is possible that it will not maintain the dominance it gained during its second century, but it clearly has a good few years left to it.

The other main stay of the quality quick-printing industry has been the silver-based paper printing plate. This photographic technology emerged in the 1960s and was responsible almost single-handedly for the demise of the conventional high street jobbing printers who were then universally using the letterpress printing process.

In the 1960s, the printing industry generally regarded the advent of these silver-based materials with near total indifference – and, to a certain extent, still do.

It is on these two technologies, then, that quick-printing has developed into a substantial world-wide industry since the first hesitating steps were taken in the UK by independent owners in 1970, to be followed by the first franchised printing chain a year later.

The silver plates were not, in fact, the first paper-based printing plates to be used for printing. They were preceeded by electrostatic plates (really a form of 'photocopy' from which one can take master images) and the direct image-master which, although a printing plate, could perhaps better be regarded as a replacement for the conventional typed duplicator master.

The significance of the silver-based plate was that it offered an image quality which was then, and still is, significantly superior to that obtainable from an electrostatic plate.

As a result, quick-printers could produce photographs of respectable quality from the same plates as they would use to print type or line drawings. Of course, it had always been possible for small printers to produce photographs on the small presses that we now associate with quick-printing.

But this involved more expensive metal plates which were also more laborious to produce and it was either necessary to go through an intermediate photographic stage to prepare a film negative (as is still largely done in the main-stream printing industry).

Alternatively, an intermediate chemical process could be used which involved the operators getting their hands dirty and would normally only produce a printing plate the same size as the original being copied.

The beauty of the silver-based material was, and still is, that a camera could produce a press-ready printing plate in one step from customers' artwork. Indeed, the same camera could also be pressed into service for other graphic arts functions.

On the press side, the *original equipment was typically* very rudimentary and largely confined to A4 images, the only size then being produced by conventional duplicators.

These presses would have relatively poor inking-power (this limits the size of solid image that one could print on a page and the ability to use glossy papers) so that the potential of the silver plate could not be fully utilised.

In the intervening years the rapid growth in quick-printing (there are now perhaps almost 3,000 quick-printers in the UK, of which perhaps 500 are franchised) has meant a very significant market for manufacturers and a resulting proliferation of equipment competing for the same market.

On the plate-making side, quality quick-printers have long considered that only silver plates give sufficient detail for the sort of work they expect to produce for customers, although a significant number have stuck with the improving electrostatic plates *and, as a result, electrostatic* out-sells silver by two-to-one.

Rapid expansion has meant a very significant market for manufacturers

There are a number of increasingly sophisticated camera-plate makers which will produce both metal and electrostatic plates on the same machine as well as carrying out a variety of graphic arts functions such as producing photographic effects for incorporation in customers' jobs.

While it is often considered attractive to have so many functions available in one piece of equipment, such cameras leave a quick-printer vulnerable to breakdown if all the functions are served by one piece of equipment and they do not offer the productivity available on highly automated silver-based equipment.

On the press side, most quick-printers are now be equipped with presses that will print up to SRA3 size (a little over twice the area of A4) thus enabling the production of a brochure with colour running right up to the edges of the sheet.

The quick-printers account *for less than 10% of press sales* up to SRA3. The design of presses has changed remarkably little, considering how many changes have affected the printing industry as a whole over the period.

The basic principles of lithography which involves a printing plate which carries no relief image, has not changed since patents were originally taken out in 1798. The lithographic plate is formed in such a way that in the areas where no image will print it is water-receptive, while in the image areas it is not.

On the press, a plate is first damped by a roller and then inked: the ink, being greasy, simply refuses to adhere to the plate in the previously damped areas. There has, in recent years, been a significant improvement in the method of *damping plates on these small* presses.

The market for small presses in the quick-print industry is largely dominated by one vendor (the A.B.Dick Company of Chicago, a subsidiary of Britain's GEC) and some 90 per cent of the presses that they now ship to high street printers are equipped with a special set of damping rollers which separate the water from the ink rollers.

These presses, like almost everything in the quick-printing business, are imported. The UK's major suppliers are now the US, Japan and Germany.

A.B.Dick, like their competitors, supply a range of presses with electronic controls and many highly automated features. Paradoxically, these have not yet found favour with the quick-printing industry since so much of the work involves short runs so that such automated controls do not come into their own.

Here one can see that it is not only in the size of its equipment that quick-printers differ from their larger commercial brethren – for in the general commercial printing industry the presses are almost unrecognisable from their predecessors of 20 years ago, so numerous are the electronic controls.

A.B.Dick is currently buying several of its competitors, bringing it into head-to-head competition with A.M.International and the Japanese Ryobi company.

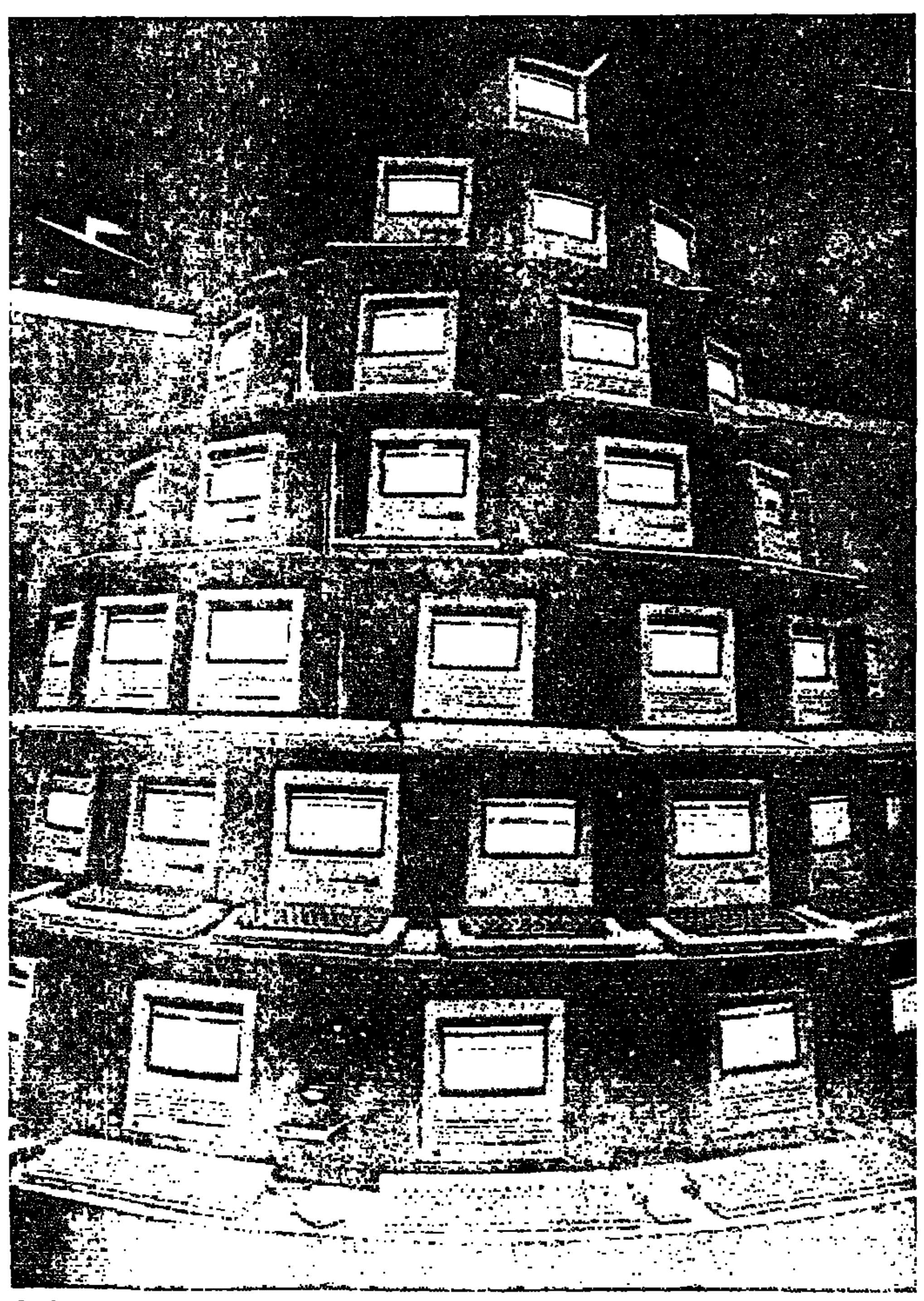
No printing job can be delivered until it is "finished" – this process typically involves folding and trimming. While the former is still a largely mechanical process, today's powerful guillotines used for trimming large numbers of sheets are well provided with electronic controls.

These allow for increased safety of operation, more precise cutting measurements, and also the ability to store programmes for complicated cutting routines to be repeated on various jobs.

As with the general printing industry, the most glamorous area for investment is in the pre-press area. For quick-printers this largely means so-called desk-top publishing (DTP) systems, described more fully elsewhere in this survey.

The Apple Macintosh was the first cost-effective system to demonstrate that professional graphic functions could be carried out on a desk-top microcomputer. While there has been a great deal of competition from IBM-compatible PCs, it is now generally acknowledged that in the graphics arena the Macintosh is a preferred platform for many.

Colin Cohen



Apples: the pick of the crop

Typesetting v desktop publishing

Death exaggerated

SINCE THE birth of desktop publishing (DTP) in 1985, when Apple introduced a system incorporating their own hardware and Aldus PageMaker software, computer industry pundits have been describing DTP as the replacement for traditional typesetting skills. If the rumours are to be believed, whilst DTP products proliferate, photo-typesetting firms look set for mass liquidation.

There is every indication that the DTP market is expanding rapidly. In the last 3 years, over 200 software companies have entered the DTP field and many large computer manufacturers, such DEC and Wang, now have their own products.

This year the market for DTP products, both hardware and software, is expected to be worth £200m in the UK alone, with forecasts for expansion to £300m by 1990.

In the US, DTP market growth is likely to be even more prodigious. DTP brought $1bn worth of revenue to the computer industry in 1987 and a phenomenal five-fold increase to $5bn in 1990 is predicted by some industry analysts.

Despite this activity, many UK typesetting companies have never been busier and are openly saying that they have no intention of converting from their existing systems to DTP. Designers are also critical of DTP, believing that the quality of DTP output is still inadequate for many commercial applications.

Barbers Typesetting in Biggleswade, Bedfordshire, is typical of the many regional typesetters experiencing a renaissance.

Beryl Bateman the managing director of Barbers, a two-person operation using Itek Graphix Digitek equipment, says: "Being a small firm, the conversion costs, both in time and finance, are not worth it. Photo-typesetting will be around for a substantial time to come as the market appears to be actually growing. With experienced operators, even turnaround times can be as quick as with DTP systems."

The recent boom in publishing, which has seen an ever-growing number of journals on the news stands, is represented, right the way across the industry – although Barbers principal clients are in the public sector, with Bedfordshire Police and Bedfordshire County Council among them, business has expanded so rapidly they are now taking on the typesetting for everything from business cards to books.

These two opposing pictures give a very confusing view of the real future of electronic publishing. Computer industry experts suggest that within three years, manufacturers of composition systems will start being bought out by PC manufacturers. Terminals at the top end of the DTP market such as the AppleMac II and Sun Microsystems Workstation continue to improve and within 18 months 1000 dpi devices (dots per inch, horizontally and vertically) could be available.

However, in the printing and publishing industries there is a growing view that instead of having two technologies competing for the same market, DTP and typesetting are complimentary and they address two separate markets. This would at least explain why typesetting firms continue to thrive in the face of the so-called onslaught of DTP products.

Quality considerations is the major topic of discussion between the two protagonists of DTP enthusiasts and advocates of 'orthodox' typographics.

Normal quality from PC-based DTP is 300 dpi whilst standard typesetting machines such as a Linotronic 100 image-maker have resolutions of 1000 dpi. To the trained eye, this is a substantial gap in quality.

Although initial application were for newsletters and in-house publications, DTP uses have expanded with improvements in software and printers to newspapers and books. But many in the publishing industry believe that 300 dpi is barely passable resolution even for these uses.

However, last year's Monotype conference was a watershed for DTP. Under the banner 'Better Looking Electronic Publishing' it was ironically hosted by a major manufacturer of composition systems. Typographics experts finally accorded DTP a role in future of their industry.

Conrad Taylor, a design consultant, said that many people were quite happy to accept lower standards of reproduction when there were cost constraints. DTP offers a low cost solution to many in-house graphics needs, especially when working with A4 layouts and uncomplex graphics.

Henry Burdett, editor of the specialist journal Desktop Publisher, developed DTP's involvement in mass circulation publications, seeing the debate in terms of practicality versus perfection.

"Good typesetting is monopolised by the fine art and advertising worlds. For the rest of us, the prime concern is getting the typesetting back to authors as quickly as possible.

"Quite clearly many users are prepared to sacrifice the quality of formal typesetting for faster production and document handling that DTP offers.

But as Burdett suggested "Only purists complain about the quality of typesetting in newspapers."

In order to meet tighter copy deadlines, DTP has come to the fore as a publishing tool rather than as a technology on its own. Many publishers use DTP as a method of producing quality drafts, before transferring the layout data to their photo-typesetting system.

This is becoming more prevalent since the development of PostScript as an international industry standard software application for page description layout. Suitable for either a PC or phototypesetting terminal, pages designed with it can be transferred from one to another by floppy disk.

But one speaker, John Miles a partner in Banks and Miles, the London typographics specialists, did remark on the dangers of allowing the proliferation of high quality DTP – "the availability of graphics could be very seductive. Use should be kept in check or else products resembling a Victorian handbill – with a whole gamut of typefaces on one page – will start appearing!"

Clearly both the computer and publishing industries are, only just starting to live with each other. The signs are that the two technologies are starting to integrate.

Printing firms are finally acknowledging the usefulness of DTP, whilst the computer industry's prophecies of doom for typesetting appear to be premature, to say the least.

Philip Minshull

Financial Times expansion plans

A three-track strategy

THE NEW printing plant in Docklands, which starts operations this month, is likely to have a noticeable impact on the contents of the Financial Times.

"A major advantage of the new production facilities in East India Docks is that the presses will permit us to increase the size of the newspaper," says Frank Barlow, chief executive of the paper.

"This increase, from 48 to 56 pages, will allow the paper to increase its coverage of international, and, in particular, European affairs," he explains.

"It is essential that we dominate Europe," he states. "In the mid-term it will be impossible for the Financial Times to compete against the local news coverage of indigenous papers in the US and Far East. We want to provide those markets primarily with news about Europe."

The most obvious effect of the extra eight pages will be more news from both Europe and the Pacific rim as well as fuller coverage of world equity and capital markets.

However, Geoffrey Owen, the editor of the newspaper, stresses that any increase in news outside the UK will not have a detrimental effect on coverage in Britain.

"We want to improve both at the same time," says Mr Owen. "We need to exploit the trend in the UK towards a more business orientated environment and recover any fall in sales since the markets crashed in October last year."

Mr Barlow believes that the combination of improved European coverage and better distribution will provide a product which will be difficult to emulate.

The investment in Docklands provides the first part of a three-track strategy planned for the future of the Financial Times. This first track is to support and improve the printing and distribution network of the newspaper.

The FT is now printed in London, Frankfurt and New York. An extra production facility in Roubaix, northern France, which cost £1.2m, began printing 30,000 copies last month.

Mr Barlow says he is also looking at the possibility of printing the Financial Times in the Far East. He explains that options include a combination of plants in both Tokyo and Hong Kong or Tokyo on its own. The Wall Street Journal's Asian edition has a circulation of 30,000. A further option is a production plant in Chicago.

The second track of the strategy is to invest in indigenous foreign language newspapers. Mr Barlow argues that there will always be a market for local business papers. The plan is to set up joint ventures with local publishers, while also taking an equity stake in the business.

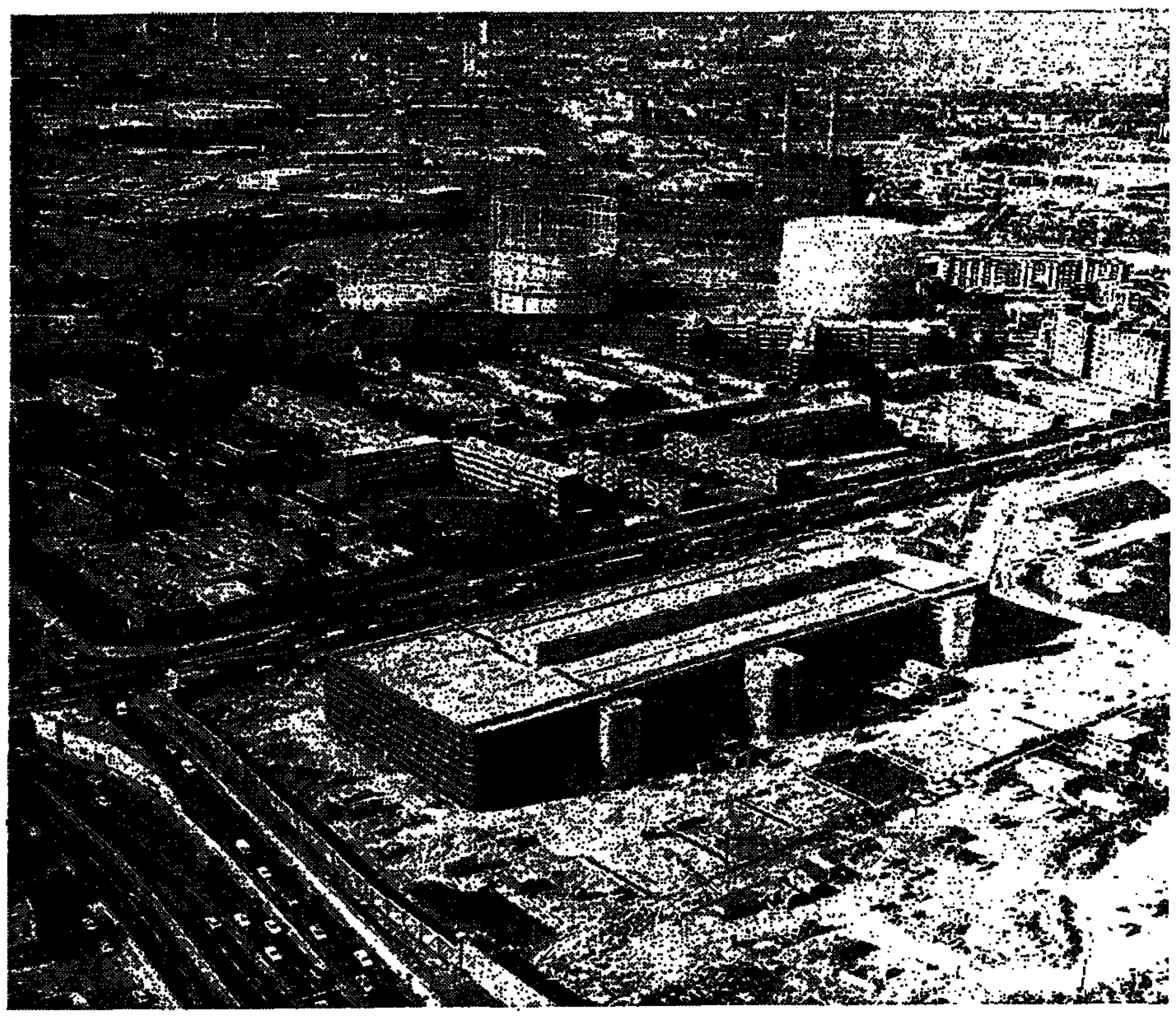
The FT has already invested in two such newspapers, Les Echos in France and the Financial Post in Canada. However, attempts to purchase stakes in other ventures, such as the Australian Financial Review, the South China Morning Post and Cinco Dias have not been successful.

Mr Barlow believes there is considerable scope for cross-fertilisation between local business papers and the FT. He points out that the Les Echos' coverage of the Paris Bourse is likely to be better than that of a London-based paper, but that the FT also has a good deal to offer Les Echos.

The modern production facilities should also help the third track of the FT's strategy — to exploit the editorial and statistical information contained in the paper through electronic means. Direct entry by journalists means that information in the newspaper will be made available much sooner because soon it will not have to be rekeyed.

"With the triple strategy, we have a winning formula," says Mr Barlow. "We want to do more of the same but better."

Paul Abrahams



The design of the new Financial Times Docklands building ensures that passers-by can see the paper rolling off the presses

FT PLANT

Move to Docklands printing

THE foundations for the modernisation of the Financial Times were laid in a very traditional setting — in Ye Olde Bell public house in the village of Hurley near Maidenhead.

The secret meetings of senior FT executives held on March 7 and 8 1986 in the pub had been called two weeks before the dramatic move by Mr Rupert Murdoch to Wapping in the January of that year.

By the time the meetings were held it was already clear that Fleet Street and its traditional labour practices would soon be dead and the agenda was clear. It was to produce a comprehensive plan for the future development of the newspaper involving the introduction of the latest computer technology, a move from its present headquarters, Bracken House, and the creation of a modern printing plant in London's Docklands.

But above all else the group of executives was asked to think what had until then been unthinkable in the national newspaper industry. Forget Fleet Street and all its traditions. Design a project that would be like any other orthodox industrial venture where the best equipment would be chosen for the job and operated with the minimum number of staff the technology required.

Industrial action by the reading room, for example, which led to "dirty" uncorrected copies of the FT going on the streets, would be a thing of the past. There would be no reading room. Journalists would enter their copy directly into computer terminals and would be responsible for its typographical accuracy.

Flexible working agreements would mean that a long-running dispute between electricians and engineers about who should service photocopying machines would equally be a thing of the past.

By July the future was spelled out clearly to staff through documents and a corporate video. It included the call for volunteers for 404 redundancies.

Nearly three years of planning on the £70m project comes to fruition this month: printing of the newspaper ends in the cramped basement of Bracken House and is transferred to the new purpose-built plant; as much effort has been put into the creation of new working practices as into the choice of the technology itself.

"It is the largest development in the FT's history," says Mr Frank Barlow, the newspaper's chief executive.

Financial Times management considered the option of going to contract printing or satellite plants in different parts of the country. The decision to build a new Docklands plant was taken because it was believed that no other printer had the precise configuration of presses the newspaper was looking for. The company also wanted to avoid being at the mercy of another company's industrial relations policies.

The most obvious change for reader and advertiser will be the improved quality of reproduction of text and pictures with both run-of-press colour and pre-printed inset colour, and the capacity for a large increase in the number of pages per issue.

The two Rockwell Goss Headliner web-offset presses which cost £10m are each capable of printing 70,000 copies an hour and the present seven units will be able to turn out a 56-page paper in four sections compared with the present limit of 48 pages. Sectionalisation is an inevitable consequence of the move to larger newspapers.

An eighth printing unit is already on order with room for a ninth which would give the Financial Times the capacity to print 600,000 copies of a 72-page paper each night at the East India Docks plant. The present UK circulation of the paper is just over 200,000.

The decision to include Ferag inserting equipment in the new plant increases the potential even further. The equipment can insert everything from pre-printed supplements and regional sections, to brochures, catalogues and company reports, at the same speed as the presses run.

"Although the nine units we will get to eventually will give us 72 pages, if we wanted to we could do an 88-page paper by printing a 16-page section in advance and inserting it. It gives us virtually unlimited paging capacity," added Mr Barlow.

The increased pages, according to Mr Barlow, "will allow us to develop the paper both editorially and in terms of advertising, allowing us to develop new advertising segments such as property, maybe antiques, and classified advertising."

There will be much more colour in the FT but editorial colour will concentrate on graphs and charts.

"We don't envisage carrying colour pictures of Mrs Thatcher on page three," Mr Barlow said.

The £70m investment in the new project includes the cost of the "front end" editorial computer system bought from System Integrators of California, the new printing plant and the cost of the more than 400 voluntary redundancies involved in the move to new technology.

The new plant will be operated by about 200 people, compared with 650 under the old system.

Great efforts have been made by production director Mr Peter Mills to emphasise the break with the past and the old dirty working conditions in Bracken House and the potted plant environment of East India Docks.

All the remaining members of the production team — the last 130 people leave the company this week — have become salaried staff, there will be only three basic pay rates and considerable efforts will be made to ensure that staff and skills become as interchangeable as possible.

They will operate a considerably simplified production process. Editorial terminals identical to those used by reporters to generate copy sit in the new plant. When an article is released for typesetting it travels by digital stream to a Monotype LaserComp which produces bromides of the article set across the required number of columns. The FT has decided that automatic full page make-up technology is not yet appropriate for its needs although newspapers already use such systems.

Instead, the bromides are manually pasted up into a complete page which is then photographed. A Krause fully-automatic plate maker produces the plates that print the newspaper image at the rate of 300 plates an hour.

Soon the production of the Financial Times will be a very public process. The design of the building ensures that passers-by can see the paper rolling off the giant presses.

The old Crabtree-Vickers presses are to be refurbished, have colour units added, and will be shipped off to a new life in New Zealand.

Raymond Snoddy

David Jones on the FT's electronic editing system

Sea of conflicting solutions

THE INTRODUCTION of a *major electronic editing system* has thrown the Financial Times, along with most of the British newspaper industry, into a world of rapid technological innovation and numbing incompatibilities.

Although the transformation has been dramatic, the revolution has only partly run its course. Like the other big metropolitan newspapers of the world, the FT now has to make some sense of the computer industry's confusion about operating systems, local area networks, typesetting languages and communication *standards*.

In terms of technology, the way ahead is uncertain, *although one of the FT's major* objectives is not — and that is the introduction of cost-effective pagination, referring to the assembling of all the components of a page in a single manipulable electronic form. Planning for this has already started, although the timescale remains in doubt.

At the same time, the Financial Times will be incorporating the implications of the new so-called 'Fourth Wave' of electronic systems into its existing *structures*. This will lead to wider deployment of powerful microcomputers running general industry packages interfaced with the existing newspaper production software.

At the heart of the FT's transformation has been the birth of EDWIN, standing for EDitorial Word Processing International Network. This acronym was devised initially as an aid for the introduction of screen-editing, but the word has since stuck.

EDWIN is a customised version of a substantial 350-screen newspaper production system supplied by System Integrators (SII), of Sacramento, California. SII's highly flexible software package is designed to run on Tandem fault-tolerant minicomputers used widely in the City, the telecommunications industry and defence.

EDWIN has a substantial degree of distributed intelligence with proprietary high resolution black-on-white Coyote screens utilising 2MB of memory. Data is supplied at the unusually high speed of 38.4 baud from screen controllers connected to the Tandem TXP minicomputers.

Although not a true Fourth Generation Language database, the software has a range of 4GL characteristics enabling many applications to be built by users, rather than by traditional data-processing staff.

Edwin in evidence: the FT's newsroom

This was important in developing rapidly the typography for the 130-plus special regular tables that appear in the FT — not to mention the commodity prices, world stocks markets and the five pages of unit trusts and UK shares information service which are fed in from a suite of DEC and Compaq computers at the FT's statistics subsidiary, close to London's Tower Bridge.

In addition to enabling reporters and editors to produce the daily newspaper, EDWIN also collects automatically the 20 news services and makes them available for use by various sections of the editorial staff. It also allows FT personnel to interrogate at their screens the latest prices on Reuter Monitor.

One of the system's strengths has been the way in which its design allows for modular growth and flexible remote operation. The FT's printing and publishing departments' move to London's East India Dock has been accompanied by the introduction of typesetters connected over telecommunications lines.

The newspaper will be electronically created at its central London headquarters, currently at Bracken House, but soon to be Horseshoe Court at the southern end of Southwark Bridge; the physical creation of the newspaper is on Monotype Lasercomp Express imagesetters at East India Dock. The communication links handled by General DataComm multiplexors are two 2mbps British Telecom Megastream channels with triverse routing of local ends and similar capacity on the Mercury network, with microwave links.

The deep divisions within the general computer industry pose many uncertainties for the newspaper's development over the next few years. Powerful newspaper software is appearing in the marketplace in the Unix world and Apple Mackintoshes. And round the corner lies the impending arrival of OS/2, IBM's new microcomputer operating system.

All three operating systems are currently mutually exclusive beyond anything more complicated than basic file transfer. So, one of the major tasks facing the FT will be to design an approach which can use the best features of each while at the same time enabling it to attain the tight degree of integration needed between different departments.

Staff in the editorial, advertising, graphics, production, *and other departments*, which historically have not really been required to do more than co-operate with each other, will increasingly need to work more closely together if the objective of creating a complete electronic counterpart of the finished page is to be achieved.

A key role in developing this integration is likely to be local area network technology enabling one department's computers to communicate interactively with another's. But again the industry is a sea of conflicting solutions, divided between IBM's Token Ring technology, Apple's Appletalk now linked with DEC's Decnet, and the world of Ethernet, itself available in myriad incompatible flavours. And as if that were not enough, each of the network solutions only works on certain computers so that newspapers, in deciding on a particular computer or package, may also unwittingly be choosing its network solution.

The FT, as a Johnny-*come-lately to computerised* editing compared with its US counterparts, has arrived just at the moment when elsewhere in the world and especially across the Atlantic, the newspaper industry's traditional reliance on software and hardware packages is beginning to break up.

Until recently system suppliers managed to *shield* newspapers from the worst excesses of the computer industry's inability to create and adhere to effective standards.

But the suppliers' failure to embrace enthusiastically the 'Fourth Wave' technology, typified by the attractions of the desktop publishing explosion, combined with their inability to find an answer to pagination that is technically and financially satisfactory, has encouraged and sometimes forced newspapers to lift the veil and address directly what is happening in the computer industry at large.

It will be several years before newspapers once again have a stable technological base on which to plan their development — and the jury remains out as to the respective long-term roles in the metropolitan newspaper industry for IBM, Apple and Unix.

Laura Raun on the Netherlands printing industry

Hoping to carve out a European niche

MOST PEOPLE think the German Johan Gutenberg invented movable type. But the Dutch claim that Laurens Janszoon Coster, a Haarlem printer, discovered interchangeable letters first and was robbed of the credit by Gutenberg.

Today the Dutch still claim to be a leader in European printing, thanks to five centuries of advanced technology, political tolerance, sophisticated publishing and graphics industries and an international outlook. It is hoped that a talent for foreign languages and convenient geographical location will catapult the Netherlands into a major printing centre in the single European market.

The Dutch printing industry is far from being the biggest in Europe, with annual turnover of Fl8bn. But it is the best, insists Mr Martin Handgraaf, chairman of the Royal Association of Graphic Companies, the leading organisation representing the printing industry.

"I'm sure productivity in the Netherlands is a lot higher than Germany or Switzerland," he says confidently. "Because of the more expensive labour factor, we put more investment in machinery and that raises productivity."

Coster's discovery around 1423 soon gave rise to posters, pamphlets and books, fuelled by relatively high literacy and wealth. By the golden 17th century the Netherlands was the most important book publishing centre in Europe, with many of the works destined for abroad.

Political tracts and philosophical essays that were considered heretical elsewhere were freely printed in the tolerant Netherlands. England's John Locke, France's Descartes and Portugal's Spinosa all found political refuge among the open-minded Dutch.

Some publishing companies that began in the 16th century still survive today. Elsevier, the second largest publisher, traces its roots back to 1575, while a later crop of publishers was established in the 19th century.

Early this century the graphic design industry blossomed around the "De Stijl" school of artists, including Mondrian. Graphic designers in the Hague, like their counterparts in Paris and Berlin, infused typography with new importance.

Today typography and graphic design are more integrated into Dutch society than in most countries, with notable attention paid to printed matter and transport vehicles' graphics.

A small but successful paper industry has clearly helped. KNP Royal Dutch Paper Mills and Buehrmann-Tetterode are both known for high quality paper and paper products.

Colour printing plant in Eindhoven

Mr Martin Handgraaf: confident about productivity

Ironically the printing industry has flourished without having most raw materials close at hand. Nearly all printing equipment is imported, mostly from West Germany, but also from the UK, Scandinavia, Italy and Japan. Wood pulp for paper must also be imported since the Netherlands has few suitable trees.

Other challenges have come from the Netherlands' high wages and short working hours. Workers' pay is among the highest in Europe – about Fl36,000 a year for a phototypeset operator.

The printing industry was the first to move to a shorter, 36-hour work week several years ago, under heavy pressure from the labour unions. But now that other industries have followed suit and few new jobs have been created the pendulum is starting to swing back toward the 38-hour week.

Mr Handgraaf, like his counterparts in other industries, is lobbying the centre-right government to cut the steep taxes and welfare premiums that keep wages high. But meanwhile he seeks to emphasise the industry's comparative strengths.

An obvious one is high technology. Offset printing accounts for nearly 70 per cent of Dutch printing capacity, followed by Letterpress with 17.5 per cent, Rotogravure with 12 per cent and other techniques making up the rest. About two-thirds of all Dutch newspapers are printed offset.

One newspaper is experimenting with flexography, a technique using plastic founts that is normally used to produce higher quality print on cardboard. Even in a country as small as the Netherlands the NRC Handelsblad newspaper beams its copy via satellite to two other printing plants.

Modern equipment is fuelling the growth in market segmentation — smaller print runs for specialised purposes. Sponsored magazines, for example, are burgeoning.

Desktop publishing is the key to the future, in most people's eyes, and the Dutch intend to stay ahead of the game. Computerised input and telecommunication links are particularly important in the expansion of international printing.

Exports account for only about 17 per cent of the industry's total output but they are a promising sector. Satellite link-ups allow foreign publications to transmit their pages directly to the Netherlands, print there and distribute quickly to the rest of Europe.

An efficient transportation network leads to the hinterland — combining road, rail, water and air with modern logistics. Limburg, the country's most southern province, is strategically placed for distribution to the more densely populated parts of western Europe.

These advantages have enabled the Dutch printing industry to win contracts to print the Economist, the weekly newspaper owned 50 per cent by Pearson, publishers of the FT, the Wall Street Journal, belonging to Dow Jones, and the International Herald Tribune, jointly owned by the New York Times and Washington Post.

In spite of the influx of new technology, labour relations in the Netherlands industry have remained peaceful — certainly more so than London's Fleet Street. Employers and unions have generally agreed it is in both their interests to retrain workers made redundant by new technology.

"We have had no Wapping," boasts Mr Handgraaf. "Murdoch did it all at one time, ending with a war. We have done it gradually with no strikes."

In the run-up to the single European market of 1992, however, competition is stiff for countries wanting to carve out a niche as a European printing centre. Earlier this year France was chosen by the FT as the location for its new European printing plant, by the Guardian for its new European edition and by Mr Robert Maxwell for his new European newspaper.

Nevertheless the Dutch are confident. "We have enough capacity, quality and technology to operate as an open, electronic mailbox for foreign publications wanting to print here," Mr Handgraaf summarises. "If something goes wrong in France or Italy you must have consultations and then language can be a barrier. Not here."

FRANCE

State subsidies scrapped

THE FRENCH printing industry is on its way to meeting the competitive challenge of the single European market in 1992. Companies which had fallen behind in the technology race, have caught up in the last few years by importing some of the most sophisticated printing equipment available.

In 1987, the industry invested about FFr3.5bn ($583m), representing 9 per cent of turnover, according to the French Federation of Printing and Graphic Industries.

Newspapers in France are among the best-equipped in the world, and will be operating entirely on web offset by the end of the year when Le Monde replaces its old presses.

The country comes second only to West Germany in continental Europe in image-processing, with 130 electronic image processors (EIPs) compared to West Germany's 165; and 720 scanners against West Germany's 1,100.

France is notable for its early abandonment of letterpress printing systems in favour of lithography. The State no longer bails out printing concerns in difficulty, much to the delight of the more successful sectors of the industry, according to at least one source. Government subsidies pulled down prices artificially, distorting the economics of printing and perpetuating inefficiencies, say some.

Another positive development for some observers is that integrated printing operations in France have started to decline among small sector firms, although not among large ones.

The trend toward integration has been a source of controversy for many years in France, and was strongly criticised by the former Culture Minister, Jean-Philippe Lecat in his White Paper for the printing industry in March last year: "Top quality cannot always be achieved by an integrated printing operation, regardless of the standard of equipment," he said.

The State "has become aware that its role is not that of a printer, but government departments have a genius for surreptitiously developing their markets and exceptions to the rule," he declared.

Two areas needing attention in the industry before trade barriers in Europe finally come down are quality-control and training, says an industry analyst. About five years ago, the first Japanese-style quality control circles were set up by the larger printing concerns, but more improvements must be made by smaller firms, he added. On the training side, the federation will unveil a new programme in October to help upgrade print worker qualifications.

Despite former predictions of a gloomy future for the print and paper industries, the printing industry's production rose by 4 per cent a year between 1980 and 1985, and by 7.5 per cent a year in 1986 and 1987.

Competition has driven prices down, but new services in printing with high value-added content have generated an annual 4.5 per cent increase in turnover at constant prices in 1986 and 1987 to total an estimated FFr40.4bn. Even so, France remains a net importer of print.

In his White Paper, Mr Lecat pointed out that France has the third largest printing industry in Europe, but is the world's leading importer of print. Efforts to redress the balance should be directed first at mail-order catalogues and periodicals before tackling books progressively, he said.

Printing companies are reacting differently to the challenges ahead. The Hachette group — number one in France since it acquired Danel — is basing its strategy on world-wide expansion and recently established a strong presence in the United States.

The second largest group, Jean Didier — the scene of an ugly strike and lockout over workers redundancies — is aiming to become Europe's leading printer of periodicals and catalogues. It is building a new plant south-east of Paris, where it will instal six 3.65 meter rotogravure presses, imported from West Germany, and 24 web offset machines bought from Komori of Japan.

The multinational concern Moore-Paragon has become the third largest group in the industry by developing high value-added products, according to the French Federation of Printing.

One key sector where France lags behind is in the manufacture of printing equipment. The handful of companies operating in this sector includes only one maker of web-offset machines — Harris Marinoni, the French subsidiary of the US firm Harris Graphics that was recently acquired by the West German printing giant, Heidelberger Druckmaschinen.

One of the other French machine manufacturers, Seailles-et-Tison specialises in form-printing equipment.

Chambon, which holds a substantial share of the world market in sugar box printing equipment, is for sale after filing for bankruptcy. Most of the machines in service in France were supplied by West Germany, with Britain, Switzerland and Italy some way behind. Japanese suppliers are making steady progress since they entered the French market in the early 1980s.

Barbara Casassus
Paris

Small printing presses are having to fight off competition

Presses under pressure

THE FUTURE of the small printing press is a favourite talking point among printing press manufacturers. Industry pundits have long predicted that the rise of advanced photocopiers and the laser printer must inevitably affect sales of small presses.

In time, they say, the small press will all but disappear. This is not an argument which cuts much ice with the small press manufacturers. They report that the highly competitive market for small presses, estimated to be in the region of 3,000 machines a year in the UK alone, continues to grow at about five per cent.

"If you want good registration and good quality, then don't use a photocopier," is a rallying cry of small press manufacturers. They can also demonstrate that once a run gets above a 50 to 100 copies, the price per copy may be cheaper using a press.

When it comes to colour photocopying, the poor quality of the current machines tilts the argument further in favour of small presses. Laser printers and desk-top publishing have their place, they say, but they do not threaten the traditional offset presses.

Sales staff of the West German manufacturing giant, Heidelberger Druckmachinen — widely known as Heidelberg — the world's largest maker of machinery for the industry, recently enlarged a laser-printed letter 80 times just to highlight the problems of quality.

Problems at Rotaprint, the UK's best-known name in small presses, appear to have undermined the argument that the small press market is proving difficult, however. Rotaprint went into receivership in April and was bought up by venture capitalists Alan Patricof Associates.

Jeffrey Wilkinson, chairman and chief executive of the new company, Rotaprint Industries, said, however, that Rotaprint was suffering from uneconomic and obsolete manufacturing, not poor sales — "sales were always buoyant. They couldn't manufacture machines fast enough." Turnover is increasing and he expects the company to break even this year.

The health of the market is also demonstrated by the number of suppliers who are now competing for a share of machine, accessory and supplies and maintenance sales.

Between 15 and 20 manufacturers now have a direct or indirect representation in the UK. Names such as Ryobi, Hashimoto, Fuji Shinohara, Hamada and Sakurai testify to the growing ambitions of the Japanese, in particular. The market for small presses — mainly consisting of machines for A4 and A3 papers — is generally divided into three sections: commercial printers, instant print and "in-plant," referring to companies which have set up in-house printing facilities.

Marketing equipment to these sectors, each with their different requirements, tends to vary greatly and suppliers which are very strong in one market are often weak in others. A clear trend is for suppliers to try and broaden out into other sectors of the market.

For example, Heidelberger of West Germany began offering small A4 presses aimed at the in-plant printer for the first time three years ago — and with it they are having to offer their first-ever maintenance contracts.

AM Multigraphics, a large US supplier whose A4 1250 press is a historical leader in the inplant market, is now targeting the commercial printer with new models. Rotaprint, having contracted out most of its manufacturing, is able to buy-in a wider range of machines and hence attack a larger market.

The market for low-cost in-plant printers is under the most pressure from new technologies, since companies which have their own operations are most likely to opt for photocopiers. Dave La Sage, sales director of AM Multigraphics, says that sales in the inplant market have been "fairly flat".

Although some sites are re-equipping, there are few new sites being set up. The difficulties of approaching a new market for the first time have impeded Heidelberg, which is dominant in the commercial printer market. Mr Denis Durham, sales director at Heidelberg Graphic Equipment in the UK, acknowledges that some of its rivals in this market may be more organised and use more suitable sales methods, such as offering total maintenance and supply contracts.

"We're at a crossroads. We've got to make some decisions about this," he says. Mr Durham, estimates that there could be as many as 8,000 in-plant printers in the UK, although Heidelberg only knows about 3,000 of them.

Marketing to the UK's 1,000 plus instant print shops is also difficult. This sector has largely bought AB Dick, Rotaprint and Gestetner presses. Purchasing by franchises is often centrally controlled, so suppliers have to win the endorsement of the main licensee. AM Multigraphics is now the main supplier to Prontaprint.

The commercial printer market is showing signs of a resurgence after a period of difficulty in the early 1980s. Heidelberger is extremely strong at the higher end of this market, with no competitors whatsoever for some large multicolour machines, while Rotaprint is strong at the smaller end.

Competing against Heidelberger in the commercial printer sector is proving difficult to all rivals. AM Multigraphics has put a product line together but admits that it will never threaten Heidelberger. Ry-Offset, which supplies the leading Japanese Ryobi machines, has also endeavoured to make an impact in the commercial print market.

One problem for competitors is that Heidelberger's presses have customer loyalty.

Small printing presses have not changed a great deal over the years, with many older models still selling strongly on the second-hand market. However, the development of easy-to-operate, highly reliable electronically-controlled presses may have the effect of opening up the market.

Ryobi and AM Multigraphics are both showing what they believe will be "world beating" products at the IPEX exhibition, incorporating the latest technology. State of the art design has never been as important to the printing market as reliability, but with the competition increasing, most of the suppliers are having to offer the same facilities as rivals.

With this in mind, UK suppliers Rotaprint and TC Thompson are also co-operating on the design of major new models to be launched next year.

David Lawrence

SATELLITES

Lifeline for the global village

PERCHED about 22,000 miles above the earth is a chain of communications satellites which is playing a silent, yet vital role in a revolution in international publishing. They straddle the world to link newsrooms with remote printing sites in the production of newspapers and magazines for the "global village".

Fourteen years after the launch of the first permanent non-military orbitting satellite, most of the world's major publishing companies have established links with this chain which have allowed them to expand from their domestic bases and compete in the globalised market for news and advertising.

Satellites have breached distances to the point where it is possible for a newspaper to be read over breakfast on the day of publication by people on every continent.

The emergence of an affluent and influential readership has provided the impetus for the moves into remote satellite printing by groups such as the International Herald Tribune, Wall Street Journal, Financial Times, USA Today, and the Nihon Keizai Shimbun, as well as Chinese and Arab governments.

Characteristics of this albeit relatively small number of readers is that they generally have English as a first or second language, travel regularly and have a need for international news as a tool in their employment.

Mr Lee W Huebner, the publisher of the International Herald Tribune, earlier this year told a London conference that his company sees itself as producing a "community newspaper for this emerging family of international citizens".

Readers of these newspapers, he said, "may live in Tokyo or London, in New York or Paris, in Rio or Riyadh, and yet they often have more in common with one another than their geographical neighbours down the street. These are people whose lives stretch regularly across national boundaries."

The three principal satellites for international printing are Telecom 1, ECS and Eutelsat which are shared by the publishing houses.

In newspaper and magazine production rooms pages are photographically composed, electronically scanned and converted to a stream of digital data which is transmitted by a microwave beam to a satellite.

From the satellite the digital information is relayed to remote printing works where a computerised process is employed to transform it into a facsimile of the original page.

The process allows newspapers and magazines to be printed as close as possible to consumers, limiting the need for a considerable amount of relatively costly and time consuming train, truck and air transportation.

The economies to be gained from remote printing, once an initial base has been established, have led to a proliferation of remote printing sites in North America, Europe and Asia during the past decade.

Companies moving into Asia have found that the distances between major cities justifies the establishment of more than one remote site. The Far East Asian Economic Review, for example, discovered that the annual cost of flying copies to Singapore from its Hong Kong base was more than its editorial budget.

Since 1974, when the Paris-based International Herald Tribune produced its first edition in London by facsimile, its network has expanded to 10 sites around the world, six in Europe, three in Asia and one in the US. This expansion gives the paper daily access to 164 countries and has created a situation where only 14 per cent of its readers are in France where it grew up as the Paris Herald.

The IHT's world-wide circulation has grown 36 per cent since 1980, during the period of most rapid expansion in its regional development.

The Wall Street Journal was at the frontiers of the new technology when in 1975 it established a north-south link in the US. From this base then the company formed a broad remote plant network across the US cities and has moved into the European and Asian markets.

Unlike the IHT and FT, the Wall Street Journal has taken the decision to print three distinct editions, differentiated editorially, with the aim of serving the different needs of the readerships in the US, Europe and Asia.

The FT launched its European edition in 1979, using Frankfurt as a base for distribution by road and air. Earlier this year the company opened a plant at Roubaix, near Lille in France, in an attempt to strengthen its distribution capacity.

In 1985 the paper took a major step in its plan to create what Mr Frank Barlow, the FT's chief executive, described as "an international paper with its roots in the City [of London]" when it commenced printing at a plant outside New York.

USA Today has made the most recent and dramatic entry into the international newspaper market. The paper has established a more "popular" newspaper format which, unlike the others in the international market, is concentrating, for the moment at least, on the creation of a "home town" newspaper for Americans.

The Gannett Company launched USA Today in September 1982 through a domestic satellite and remote print site network and used this experience to move rapidly towards the creation of two other distinct editions for the European and Asian/Pacific markets.

In October 1985 the company established a print site in Singapore and this year further expanded its Asian operations in April with the start-up of printing in Hong Kong. The European and Middle East markets are served from a plant at Lucerne, Switzerland.

The Nihon Keizai Shimbun, with a daily circulation of 2.7m, moved offshore from its Tokyo base last year to begin printing editions in Japanese from remote plants in New York, Los Angeles and Heerlen, in the Netherlands. Other Japanese groups are considering the potential for similar moves.

Magazines such as the Economist, Time and Newsweek have become locked in fierce circulation and advertising battles as each has moved to exploit the potential offered by satellite technology.

The Economists' circulation increased 79 per cent in the 7 years to the end of last year. This was made up of a 111 per cent rise in sales outside its British base and 25 per cent within Britain.

However, Time remains at the top of the pile with international sales of 1.9m from a global circulation of 5.9m. Last year the magazine's Europe edition was selling 510,000.

While the growth of international newspaper and magazine publishing has been impressive by any measure, risks remain. The most obvious of these is the parallel development of international television which is also undergoing a revolution, especially in Europe, through deregulation.

The power of television as an international advertising medium could prove an attractive alternative to newspapers, and magazines, to a lesser extent, particularly in Europe. This may intensify competition within publishing companies for circulation and advertising.

Ray Bashford

JAPAN

Script is mastered

JAPANESE PRINTERS are in buoyant mood these days — and for good reason. Recent technological advances have, over a short period, swept away many of the technical barriers which have traditionally made processing of the complex Japanese script time consuming.

In addition, the industry has found itself well placed to capitalise on new markets which have emerged with the arrival of digital technologies, notably the compact disk and video printing techniques.

Social trends have also benefitted the industry. The Japanese appetite for books, magazines and newspapers continues to grow, producing world-record circulation figures. And older Japanese who, owing to lack of a tradition of typewriter/keyboard use, have long shied away from 'office automation' equipment in any shape or form, are now gradually coming to accept the VDT screen, an essential tool of many information processing innovations.

This new operating environment has prompted major changes in business strategy among leading Japanese printing firms. They are rapidly supplementing their conventional printing contracts with many new forms of business, and aim towards a more diversified industry.

Japan's largest printing company, Dai Nippon Printing Co., is one of the pace-setters in these changes. Manager of Dai Nippon's R&D promotion department, Takashi Toida, says that at his company they are "striving to see just how far we can expand, based on printing technology, and aiming to become a comprehensive information processing industry."

The scale of the breakthrough in the streamlining of printing processes, facilitated by computerisation, can be appreciated when one realises that upwards of 56,000 different types of characters, involving the three syllabaries of the Japanese language, must be handled by printers in their everyday work.

Previously this not only involved use of a vast array of types, but the printers also had to struggle with handwritten manuscripts from their clients. Nowadays, however, the character types are all represented as code signals and, increasingly, customers are forwarding manuscripts prepared on Japanese language word-processors.

In practice, this represents a massive saving in labour and time. Mr Toida also points out that consistency in image and print quality has also been assured by the introduction of new technologies.

Identical print quality can now be guaranteed even over lengthy periods of time, says Toida, because "cassette tapes are used to store the details of paper quality and machine condition in a digital format."

The biggest changes at Dai Nippon can be seen in its diversification into new areas of business. Utilising a work force of 11,000 and an annual R&D budget of about Y70bn (£307m), the company has invested heavily in new technologies.

It is now a leading producer of the shadow masks and aperture grills used in the manufacture of colour television sets. This embraces expertise in photofabrication techniques, an offshoot of photo-composition in printing.

Over 56,000 types of characters must be handled by printers

Another new venture is video printing, whereby video screen images are transferred onto hard copy. Dai Nippon is the sole supplier in Japan of the "sublimation transfer materials" which form the basis of the technique. Recently the company claimed a world-first with the publication of Mitsuko, a book accompanying a popular TV programme, which includes high quality printed material taken directly from high-definition TV image data.

In the print sector, Dai Nippon has used the textual information databases linked to its computer typesetting systems as core material for videotex information services and CD-ROM production. The company has produced a CD which lists the half million books placed in the National Library over the past 10 years, a yellow pages 'CD phone book' and an encyclopaedia which features retrieval by the use of key words.

One factor behind Dai Nippon's success is its willingness to experiment in technologies for which no applications are immediately apparent. This approach has brought conspicuous pay-offs in the field of laser optics and holograms. The company began research into 3-dimensional holograms 10 years ago and in 1986 developed its first transparent hologram.

Until recently, commercial applications seemed unlikely, but now the growing use of holograms in forgery prevention and ornamentation has given the sector a bright future.

Japan's printing industry does not, however, comprise only the large firms capable of technological innovation. In fact the vast majority of the industry's members are small and medium-sized enterprises.

Recognising this fact, the Japan Federation of Printing Industries (JFPI) has promoted research into the different ways in which Japanese companies are attempting computerisation of their printing processes.

It is also examining the development of information databases, and the procedures which might be introduced to utilise these most effectively. The JFPI's principal aims in this are to guarantee an even development of the industry nationwide, and ensure that printers keep pace with changes in related information industries.

With a view to promoting the standardisation of basic operating procedures, the JFPI has recommended:

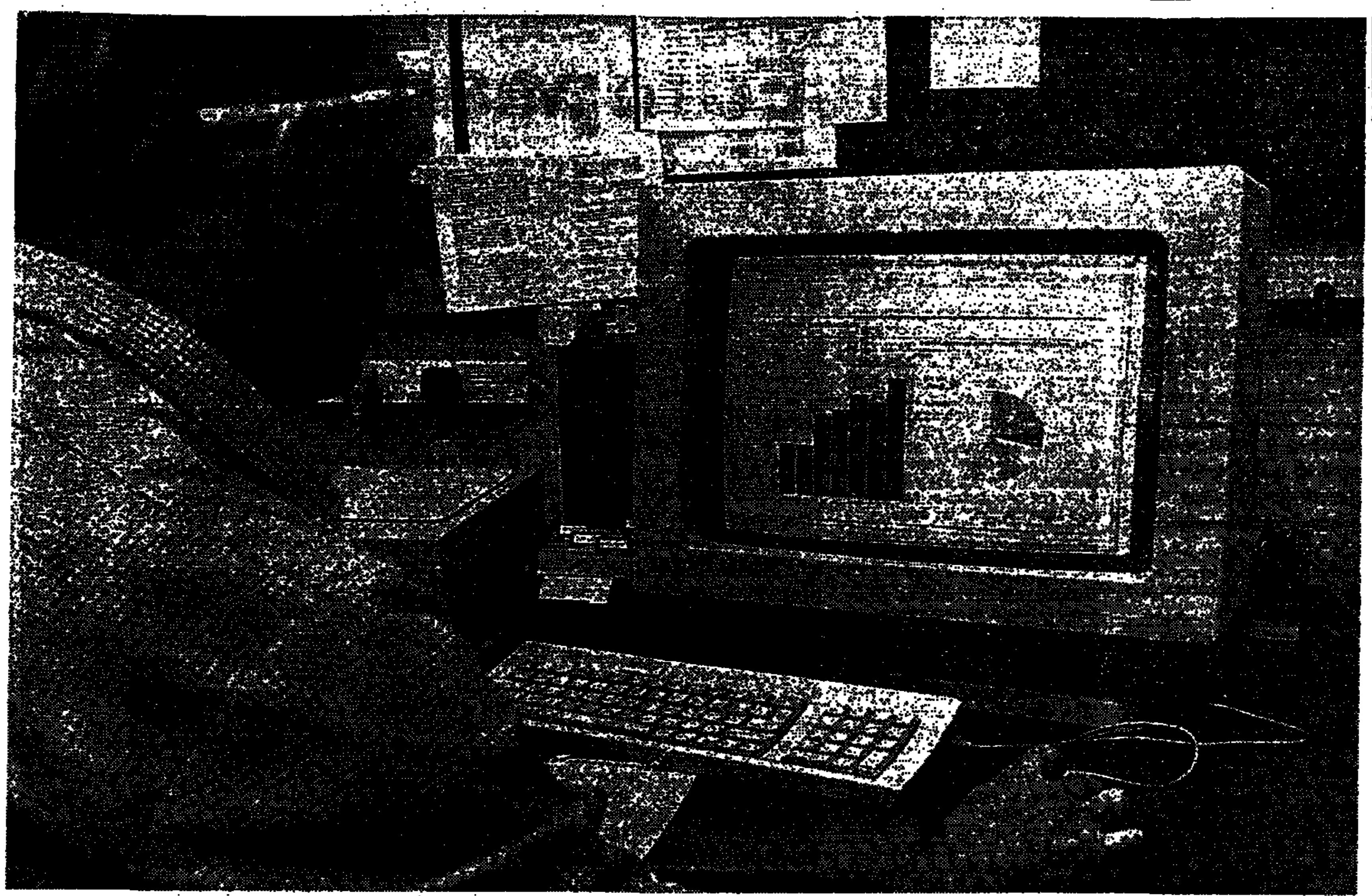
1. Standardisation of character codes, plate-making functions and communication protocols.

2. Development of customised terminals for handling data-conversion systems.

3. Development of compatible networking systems.

Concerning databases, the organisation has called for the standardisation of computerised typesetting systems for use with on-line databases and a shift in the industry's orientation towards information-processing services, featuring broad links with other information providers, notably in the broadcasting industry.

Roy Garner
Tokyo



Desktop publishing systems are used extensively for graphics in national newspapers

Philip Manchester on innovations in computer hardware

Predictions of explosive growth

INNOVATIONS in computer hardware have played a leading role in the growth of computer-based publishing systems, often referred to as desktop publishing. The combination of powerful microprocessors, high-resolution graphics screens and laser printers has made it possible to perform sub-editing and page make-up on small, inexpensive personal computers, such as the Apple Macintosh and the IBM PC.

The result is that the preparation of virtually any print form can now be performed electronically on relatively inexpensive equipment. Richard Bradley, desktop publishing manager at Apple UK, notes: "Desktop publishing has changed since the early days. Now a whole slew of material from a simple newsletter to a full colour magazine can be prepared with the systems."

Mr Bradley adds that recent figures from the research group, Dataquest show explosive growth in the sector between now and 1991. Dataquest estimates that only 2.5 per cent of time used on personal computers is spent currently on desktop publishing. By 1991 this figure is expected to be about 22 per cent.

Boston Consulting, another researcher, estimates the total potential world market value for desktop publishing hardware and software to be $1.6bn.

The impact of the technology has already been felt in some areas, according to Mr Bradley — "the systems are used extensively for graphics in national newspapers, including The Independent, The Guardian and The Financial Times," he points out.

Despite this, few publishers have taken on the concept of complete newspaper or magazine production so far. UK publisher Eddie Shah is setting up a new national newspaper, which will be run entirely with a network of personal computers. And there are similar examples in the US. But the technology has limitations and these stand in the way of more general acceptance.

While the manipulation of text and typesetting are areas where substantial progress has been made, the facilities available for colour separation and half-tone processing are still in the early stages of development. And desktop publishing has also been criticised, often with justification, for the ugliness of some of the results. Professional layout artists and printers groan at the fundamental mistakes made by novices and condemn the technology.

But this is likely to change. System suppliers see two separate markets emerging. Hugh Chappell, sales and marketing director at Taxan UK, is keen to differentiate between personal publishing and desktop publishing.

"I see a distinction between the two. Most of us have some sort of personal publishing needs — we all create forms and documents. We used to go to the typewriter, now we go to a desktop publishing package on a personal computer," he says.

"But to produce high quality still requires a certain flair. I think a new sort of skill will emerge which combines knowledge of personal computers with the approach of the professional printer and layout artist," he suggests.

There will be plenty for this new breed to learn about. The technological advances which made desktop publishing possible have shown no signs of falling off. Laser printers have dropped in price to a level where they are affordable by small businesses and can be bought for a little more than £1,000.

Personal computers continue to grow more powerful and can provide the large amount of processing power required for desktop publishing. New display screens can give much higher resolution and, therefore, a more accurate representation of the final result on screen. And the means to enter complex images, like photographs and intricate line-art, into computer systems has arrived in the last year in the form of the digital scanner.

Japanese companies such as Canon, Ricoh and NEC have been at the leading edge of a number of these technologies, especially in the area of laser printers and scanners. But it is the US manufacturers such as Apple which have taken the hardware and turned it into marketable systems.

One of the most important developments in the last two years is the Postscript page-description language, developed by the Seattle based company, Aldus. Page-description languages replace the traditional "printers' marks" and allow precise printing instructions, such as details of font types and sizes, to be transmitted electronically from a personal computer to a laser printer.

The most important aspect of Postscript is that it can be used to prepare instructions for high-resolution printers such as the Linotronic, in addition to the laser printers used in more modest publishing ventures.

This allows professional-quality print jobs to be prepared with small personal computers. But while this opens up opportunities for computer-based publishing systems' suppliers, it brings a new set of problems. Because display screen technology is well behind printer technology in terms of definition, it means that what is seen on the screen is inferior to what is finally printed.

"The whole promise of desktop publishing in the beginning was 'What you see is what you get'. In other words, what was shown in the display screen was what was printed on the paper. This works with 300 dots-per-inch. But once you go to higher resolution like that offered on the Linotronic, this is not possible," says Mr Bradley from Apple.

Screen technology has to improve — especially with colour becoming more important, he adds. Mr Bradley, in common with others from the supply industry, sees colour-processing as the next leap forward in computer-based publishing. He believes the transition to colour will happen swiftly.

"We can already define the standard range of Pantone colours with our systems — although we cannot display them yet — but I think it will come very quickly," he adds.

Mr Chappell of Taxan agrees — "more technology is needed to get higher screen resolutions. And scanners have some way to go to. Ricoh and Sharp are both working on colour scanners and it will not be long before we see them on the market," he says.

Meanwhile, a host of service industries are preparing to exploit what promises to be a lucrative market for digitised images which can either be transmitted over a network or supplied on optical disk technology.

Apple launched its optical disk reader, based on the standardised CD/ROM technology originally developed for audio use. These developments will eventually make it difficult for the professional printing industry to ignore computer-based publishing based on personal computer workstations attached to a network.

SOFTWARE

New breed of designers

MR PAUL BRAINERD, the president of Aldus, is generally acknowledged as the person who coined the phrase "desktop publishing". He is also the head of one of the fastest-growing software companies in the world. Since 1985, when Aldus first launched its best-selling desktop publishing package Pagemaker, it has grown to become a $40m company in 1987. This represented a 250 per cent revenue growth on the previous year. Profits grew by 230 per cent in the same period to $7.8m in 1987.

Pagemaker is the market leader in the desktop publishing software market and has sold in excess of 100,000 copies worldwide, giving Aldus about half of the total market.

This spectacular growth story highlights the importance of desktop publishing to the software industry. It is not an isolated story. Alongside Aldus, a number of other US software companies in the desktop publishing market have also shown great growth potential.

Adobe, a Californian-based spin-off from the legendary Xerox Palo Alto Research Center (PARC), pushed its revenues to just under $40 million last year based solely on royalty arrangements for its Postscript page-description language. Adobe has royalty agreements with most of the major computer and printer manufacturers including IBM, DEC, Apple, NEC, Fujitsu and Wang.

Postscript was developed by Chuck Geschke and John Warnock, the two founders of Adobe.

They worked for Xerox in the same academic hot house at Xerox Parc which created the Star interface, popularised on Apple's Macintosh. The Macintosh was crucial to the development of Pagemaker and, indirectly, to the development of the desktop publishing software market as a whole. The application first appeared on the Macintosh and was only subsequently taken to the more popular, IBM-compatible personal computer.

The mouse pointer and windows interface built into the Macintosh is an ideal medium for many of the operations required in desktop publishing. It allows the user to pick up and move text and graphics items in a natural and easy manner merely by "pointing and clicking". At the same time, the high resolution of the Macintosh screen and Apple's early adoption of laser-printing technology, made it possible to produce high quality results at a fraction of the usual cost.

Apple put its full weight behind the desktop publishing market at a time when its Macintosh was struggling to survive against the onslaught of IBM and the personal computer "clone-builders" from Japan, Taiwan and Korea. The strategy worked and Apple, along with its third-party software suppliers like Adobe and Aldus created a new software market which was a natural successor to word-processing, spreadsheets and databases.

Other companies to have benefitted from the the rise of desktop publishing include Xerox, which bought the rights to Ventura, an IBM personal computer package for desktop publishing and is Pagemaker's closest rival. Desktop publishing has also benefitted other areas of software too. New word-processing packages such as Lifetree's Total Word offer many features which appeared first in software like Pagemaker and Xerox's Ventura.

And the need for good graphics and photographic images has stimulated a support market to publishing in the form of advanced image-processing software. Aldus, for example, launched Freehand earlier this year and Adobe released the second version of its Illustrator package in July. Both packages provide features for scanning and manipulating images on a computer display screen for later incorporation into publications. Alongside the growth of desktop publishing for personal use, suppliers have been keen to extend their appeal into the print trade and, in the last year, have re-directed their marketing thrust.

Moira Craig, marketing manager of Aldus UK, says that the emphasis has shifted to professional training. "We recognise the existence of the printer and want to be able to promote high standards. We want to educate the user in good design and educate the print trade that it is not a threat, but an opportunity," she says.

Aldus includes a primer on publication design in its Pagemaker package and recently released a special training version of the package called Pagemaker College. It hopes to create a new breed of graphics designers and print production people who understand computer-based publishing and can exploit it to the full.

Apple itself has also supported the cause of good design in desktop publishing and Apple UK is working with the Royal College of Art on training material.

Desktop publishing software obviously has some way to go before it can overcome the established, traditional methods of the design studio and typesetters. But with increasingly advanced hardware becoming available at low cost, it is only a matter of time before the entire production desk is displayed on a screen and the scalpel and gum take their place in the museum.

Philip Manchester

CORPORATE PUBLISHING

Disappointment with growth of European market

"THE THREE letters DTP have given electronic publishing a bad name," says Neil McLeod, marketing services manager at Intergraph, one of the leading manufacturers of corporate publishing systems.

"Desk Top Publishing on personal computers created the expectation of high performance at low prices – managers were expecting to replace mainframes with PCs and were, of course, disappointed," he says.

Whatever the reasons, both analysts and manufacturers of high-end corporate publishing systems have been disappointed by the growth of the European corporate publishing market.

In the US, the market is estimated at about $500m and growing at a rate of between 20 to 30 per cent. Europe is about two years behind, but growing much more slowly.

However, in spite of the relatively small size of the market, competition has been fierce. The industry has remained fragmented both in the US and in Europe and analysts believe some companies are in a poor financial position because of the high cost of entry and lack of sales. There have been a number of significant failures – Texit in the US, for example, recently pulled out of the market.

One of the reasons why the market may not have expanded as quickly as expected is that managers looking at corporate publishing have had difficulties actually understanding what it is.

"The term corporate publishing covers so many things," says Arie Rosenfeld, chief executive officer at Scitex, the Israeli-based company. "When people refer to it they are are all talking about different things."

Managers have to deal not only with a generic jargon, but each supplier uses its own specific vocabulary. The industry has been variously described as office publishing, in-house publishing, corporate publishing, departmental publishing, electronic publishing, computer assisted publishing or even simple DTP.

"Even the consultants are confused," says Claire Hanney, corporate publishing product manager at Monotype International, the Redhill-based manufacturers. "They really have very little idea about the market or what's on offer," she adds.

Nevertheless, despite the confusion, corporate publishing has been taken up by a number of large organisations. These companies have tended to concentrated in the automotive, petrochemical and aerospace industry. They have used the systems to produce technical manuals, sales literature, brochures, internal reports and newsletters.

US and European companies which have adopted electronic publishing systems include MacDonald Douglas, GEC, Westland Helicopters, Aerospatiale in Toulouse and Peugeot UK. The US government and military have also invested in similar publishing systems.

"Large companies have begun to realise that they are spending significant quantities of money on publications," says Marcel Kreisberger, director of Xyvision, the Massachusetts-based supplier of electronic publishing systems.

"Even if publishing amounts to only 1 or 2 per cent of annual turnover, then, large multinationals are still spending millions of dollars a year in publishing documents," he states.

A report this year by the First Analysis Corporation in Chicago estimated that printing costs consist of about 5 to 10 per cent of the cost of doing business.

Some companies are creating a new post called director of technology to cope with the problems of purchase and integration

Until recently most corporate publishing was produced outside company premises. Copy was generated in-house on word processors and then re-entered by commercial typesetters on to their own machines. The typesetters provided proofs which were checked, pasted-up and printed.

Kreisberger says that a number of corporations have recognised the advantages of computer-based systems. These include:

- Their performance, which allows them to integrate both text and graphics on the same page. These can be entered from a wide range of sources, stored on database and then outputted on laser printers or high quality typesetters.
- The speed of the systems. Kreisberger claims that documents which would have taken three months can be produced in less than 18 days. Organisations are no longer beholden to printers and can decide for themselves which projects should have priority. The documents are also more secure.
- The ease with which documents can be updated, while still maintaining the standard style required for corporate design.
- The ability to keep track of those changes, particularly in the technical area, where manuals have become increasingly large and complex.
- The possibility of controlling output, which says Kreisberger, is becoming increasingly important when laser printed documents can look more official than they should be.

However, in spite of these advantages, the main suppliers in the higher end of the electronic publishing industry such as Kodak, Rank Xerox, Compugraphic, Xyvision, Monotype and Linotype agree that major corporations are having to be educated to understand the benefits of their systems. These deliver impressive performance but, as the manufacturers admit, are not cheap.

Apart from the cost of the systems, there are a number of implications for the organisation of the companies using the machines.

"Some companies are forced to restructure themselves to take advantage of the systems," explains Andrew Buxton, a manager at Compugraphic UK, based in Edgbaston.

"The problem is that no single departmental manager could afford to purchase a system on his own. The data centre manager might have to talk to the reproduction manager and refer the decision up to board level," he says.

"Some companies are even creating a new post called director of technology to cope with the problems of purchase and integration," he adds.

Not all have been impressed by the results of corporate publishing systems. Some purchasers have also been disappointed by the output from their systems because they fail to train personnel.

"Many companies have been disappointed by the output from DTP," says Hanney at Monotype. "They didn't realise that electronic publishing is just a tool. They were putting word-processor operators behind the systems without any training and then expecting them to generate pages like graphic artists."

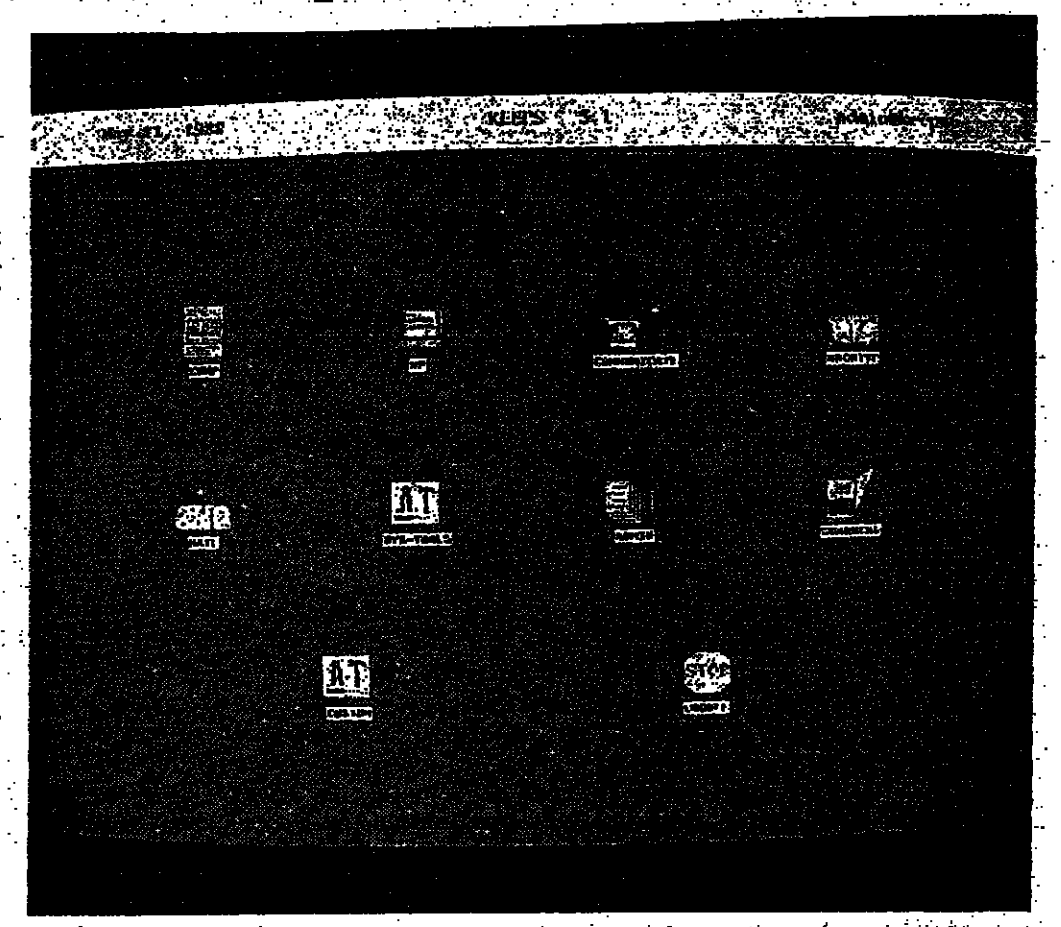
Nevertheless, the Abbey National Building Society in London, which has recently installed a Keeps system supplied by Kodak at a cost of £26,000, says that it is pleased with the results of their investment.

"The system allows us to keep our documentation up to date," says Peter Greenfield, senior technical author at Abbey National.

"When the interest rates change, we have to update all of the relevant documentation for, say, 200 branches," he says.

"The documents we are producing are also more professional," he says. "Managers are saying they are finding it easier to find information."

Paul Abrahams



The Keeps document composition workstation screen featuring icons

APPEAL

Fund aids re-equipment

THE PRINTING Equipment Educational Trust (PEET) is seeking to raise donations from industry to help British printing colleges re-equip with the latest equipment. Research in 1987 revealed that £7m was needed for new equipment to train students for work in the commercial graphic arts sector.

After sustained lobbying from the charitable trust, the Department of Trade and Industry announced a three-year budget for 1987-89 of £2.25m towards the cost of new equipment. This funding is conditional on industry and non-government bodies raising a further £2.5m. The shortfall of £2.5m is expected to come from manufacturers' discounts.

Fifteen colleges benefitted from cash last year. This year's target of £800,000, which is needed to qualify for DTI funds, must be reached by the end of October. So far, only 30 per cent of funds raised by the trust have come from printers – "it is hoped that printers themselves will begin to respond more positively to a charity that is offering a lifeline to their industry," says a spokesman for the trust.

"Well-trained staff are vital if we are to compete with the competition in Europe – and we must start now."

Head of the new appeal fund is Mr Richard Hanwell, chairman of Norton Opax. He succeeds Mr Robert Maxwell, who has just retired after a year in office with the fund.

EDDIE SHAH

'The future lies in micros'

IF ALL goes well, sometime in October Mr Eddie Shah – founder of Today, the revolutionary colour newspaper that had such a troubled birth – will return to the national newspaper industry.

At his headquarters at Warrington, dummy copies are already been prepared for The Post, a popular colour tabloid, backed financially by Jacob Rothschild and Chelsfield, the property company, and edited by Mr Lloyd Turner, former editor of The Star.

If the paper comes out and is a success it will be intensely satisfying to Mr Shah, the man who prepared the way for the Fleet Street revolution, but who was partly consumed in the process as a mixture of bad luck, inadequate preparation and technical difficulties took Today to the brink of collapse before changing hands twice in a year.

The Post could, however, occupy a more important place in the history of national newspapers than just the creation of another popular tabloid or the return to centre stage of the ebullient Mr Shah. It will be the first national newspaper produced on a desktop publishing system using the networking of standard Apple Macintosh micro-computers, rather than much more expensive specialist newspaper computer equipment.

This time Mr Shah, who is producing the new paper from the old Victorian press hall of his Warrington Guardian newspaper, says he will not launch before he is ready, but he emphasises that the desktop system is already tried and tested at least for the production of weekly newspapers. It is being used to produce the local tabloid newspapers in Mr Shah's Messenger series – papers with a total weekly circulation of 600,000 copies. Mr Shah is also working on plans to produce his local broadsheet newspaper, The Warrington Guardian, on the micro-computer system, later this year.

"Altogether we have 27 editions, nearly 900 pages and we are producing them all on Apple Macs," says Mr Shah who believes national broadsheet newspapers could be produced using such micro-computers, a view that would be disputed by the manufacturers of large newspaper systems.

Earlier this year, Mr Shah predicted that the Fleet Street revolution has only just begun. New publishers would use computer systems which were twice as efficient and cost a quarter of the price of existing equipment to explore existing markets. He accused traditional managers of only being able to "think big," more proud of spending £4m than getting effective technology for less than £1m.

Speaking at a Financial Times newspaper conference, Mr Shah declared that the future lay in micros.

"The micro is the first step in a 'plug it in, switch it on and bash away at the keyboard' environment. The software available for it, for only a few hundred pounds, can make up pages, move pictures around, typeset copy and do complicated financial projections," Mr Shah said with all the zeal of a convert. Mr Turner, a very experienced tabloid editor is equally enthusiastic about the potential of the technology.

Mr Eddie Shah will not be launching before he is ready

The further fall in the cost of entry would see the market fragment with launches of new papers aimed at all, Mr Shah added.

The Messenger Group chairman is now in the business of trying to turn theory and belief into reality. Cynics point to his over-reliance on the wonders of technology, albeit different technology last time round, but many of the newspaper specialists who have made the pilgrimage to Warrington have been impressed with what they have seen.

"We don't have any page make-up. The pages are made up by the subs (sub-editors) on screen. You see it as you get it. You can enlarge or crop pictures on the screen," said Mr Shah.

A tabloid page with all its constituent parts can be made up in about four minutes.

The Apple Mackintosh computers are being used with a software programme by Talbot Publishing Systems of Bournemouth, called NewsWrite, for the front end of the system. Shah has chosen Aldus PageMaker software for page assembly.

Press Association reports are already available on the electronic system; Reuters will soon be added.

New offerings are coming in all the time. A Leeds company has offered to provide all the racing results already formatted and ready to go into the PageMaker system.

Communications with printing plants which caused production bottlenecks in the early months of Today have been greatly simplified. The completed page on the micro screen is sent via a megastream line to another computer screen at the printing site where it is put through a Linotronic automatic typesetter.

The entire package has cost the Messenger £1.2m to put together.

The Post will have around 60 journalists in Manchester and 25 in London and a total of 130 computer screens, more than 80 of them linked by an Ethernet system.

This time, Mr Shah is convinced everything will be ready and if it is not, then his partner and managing director Mrs Helen Graham will make sure that the paper is not launched until it is.

"I feel that there is a market for a popular appeal entertainment newspaper which is not sleazy," says Mr Shah who hopes to have 1m copies of his paper on the streets before the end of next month. Because of the low cost technology, he believes The Post could break even on a circulation of 300,000.

Raymond Snoddy

Raymond Snoddy looks at newspaper presses

New Fleet Street gears up

THIS WEEK the first Daily Mail readers will receive copies of the newspaper produced on Associated Newspapers' new £80m plant at Harmsworth Quays at Rotherhithe.

Like other national newspapers which have invested in new printing plants in London's Docklands or elsewhere, the clarity of printing should be greatly enhanced complete with run-of-press colour.

Publishers and printers will, however, be casting a very keen eye over the new, more colourful Daily Mail because it is being produced by the flexographic presses of Koenig & Bower, according to Associated the first flexographic presses in the UK.

Supporters of flexographic, an enhanced form of letterpress, claim it can produce a high consistent standard of colour matching anything web offset can produce in anything less than optimum conditions.

But the unique selling point of the process, which has helped its introduction on presses in both the US and Italy, is that only flexo can use water-based inks which dry virtually the moment they hit the page. Unlike oil-based inks they do not smudge or come off on the hands.

The gradual coming on stream of the new Associated plant means that all copies of the Daily Mail, Mail on Sunday and Evening Standard will be printed on eight Koenig & Bauer presses by next spring.

The presses can turn out copies at the rate of 70,000 an hour of much larger papers. The maximum size of the Daily Mail rises from 48 to 64 pages, and Evening Standards of up to 80 pages and Mail on Sundays of 96 pages can be produced.

The coming on stream of Harmsworth Quays is one of the final instalments in the £1bn transformation of Fleet Street. It is a transformation that has included the move to the latest technology with manning levels to match and an exodus that has led to a partial recreation of Fleet Street, at least in printing terms, in the London Docklands.

There, within an area of a couple of miles, you can find examples of the three printing processes chosen by British national newspapers: web offset, flexographic and anilox letterpress.

The Daily Telegraph chose, as did the Financial Times, Rockwell-Goss web offset presses.

Nearby on the Isle of Dogs The Guardian is using anilox presses from Koenig & Bauer, chosen to avoid too drastic a break with the letterpress traditions of Fleet Street and because it is a system that cuts paper wastage to a minimum.

Over the past couple of years all Britain's national newspaper managements have been in the market to buy the latest printing presses or sign contracts to print on someone else's modern presses.

Apart from Koenig & Bauer, the names on most people's shopping list have included Rockwell-Goss, the UK subsidiary of the US multinational, MAN Roland of West Germany and Wifag of Switzerland.

Mr Jack Ferguson, deputy managing director of Mirror Group Newspapers was responsible for the re-equipment programme at the Daily Mirror.

"The essential thing was to have constant reliable high quality reproduction," said Mr Ferguson, who in the end chose MAN Roland (as has Mr Rupert Murdoch's News International) and the colour editions of the Daily Mirror are already coming off some of the 21 new presses bought in an order worth £70m.

Other important factors Mr Ferguson was looking for included speed, integrated four-colour units to ensure good quality colour register, the amount of space taken up by the presses and folders that would stand up well to high-speed printing.

The most important advance over the past five years, he believes, has been the dramatic increase in the use of micro-electronics to pre-set, monitor and control the running of large newspaper presses.

According to some estimates the electronic element of modern presses is beginning to account for up to 30 per cent of the cost compared to 5 per cent 10 years ago.

Full pre-setting of ink and water values for each newspaper page can be achieved by scanning the plates or negatives before the presses roll and feeding the data into the press control system.

As Mr Frank McKay, a vice president and general manager at Rockwell Graphic Systems told a Financial Times conference earlier this year, this contributes to print quality, cost reduction through low waste when the presses start and greater flexibility for edition changes.

Such systems also allowed, Mr McKay added, "a total production run to be automatically managed across several presses, be they located in the same plant or not."

All the four main components of newspaper printing presses - reelstands which unwind the reels of paper, printing units, folders and press control systems — had evolved to give both higher and more consistent product quality and greater flexibility.

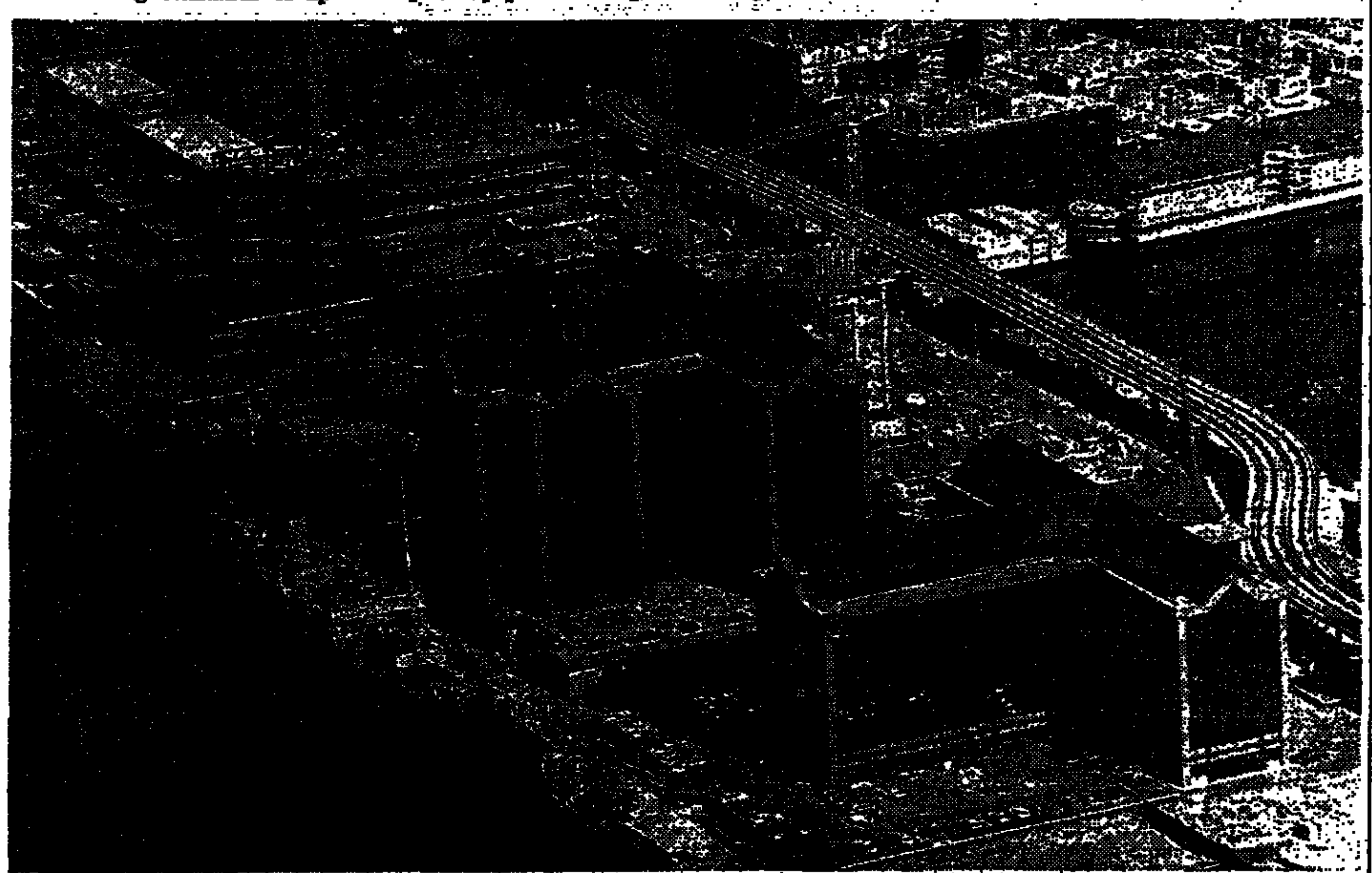
The push towards higher print quality combined with greater flexibility in use are clearly going to continue.

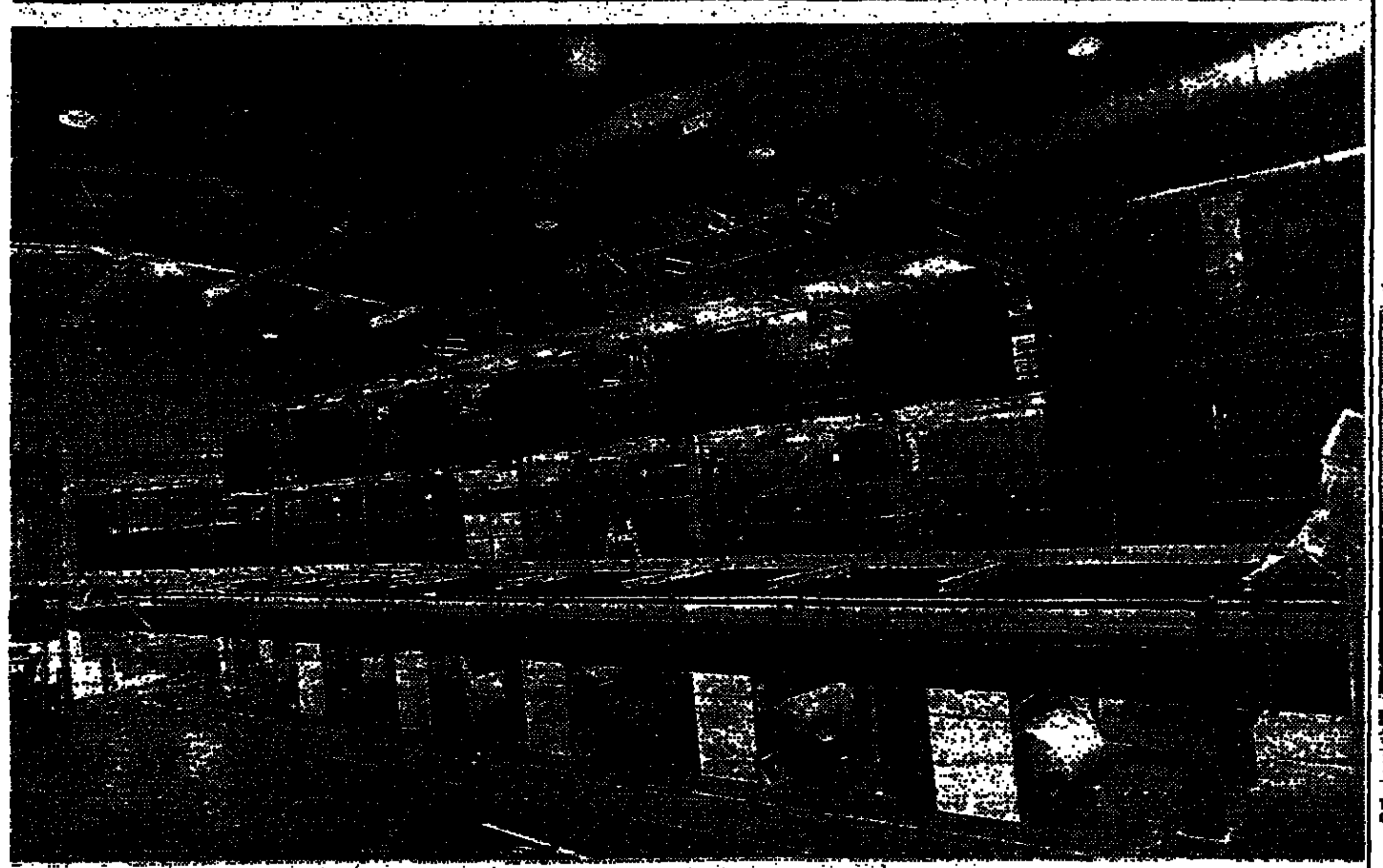
Rockwell says it is already prepared to provide presses to print newspapers where every page is printed in full colour if that is what the market wants as the gulf between newspaper and magazine print quality continues to narrow.

Other possibilities for the future of newspaper presses include the use of resin—based inks on offset presses, at present rather expensive, to reduce the smudging factor and an anilox version of the web offset press further to reduce start-up paper.

Perhaps most dramatic of all, direct digital imaging of plate cylinders is under investigation. This could eliminate printing plates and make edition changes faster and less costly.

The combination of the continuing pace of change, and the increasingly competitive environment in which newspapers operate, mean that the days are over when newspaper presses were not only built to last a lifetime but did.





The Daily Telegraph chose, as did the Financial Times, Rockwell-Goss web offset presses. Pictured above is the exterior of the new Docklands plant and the Telegraph's presses

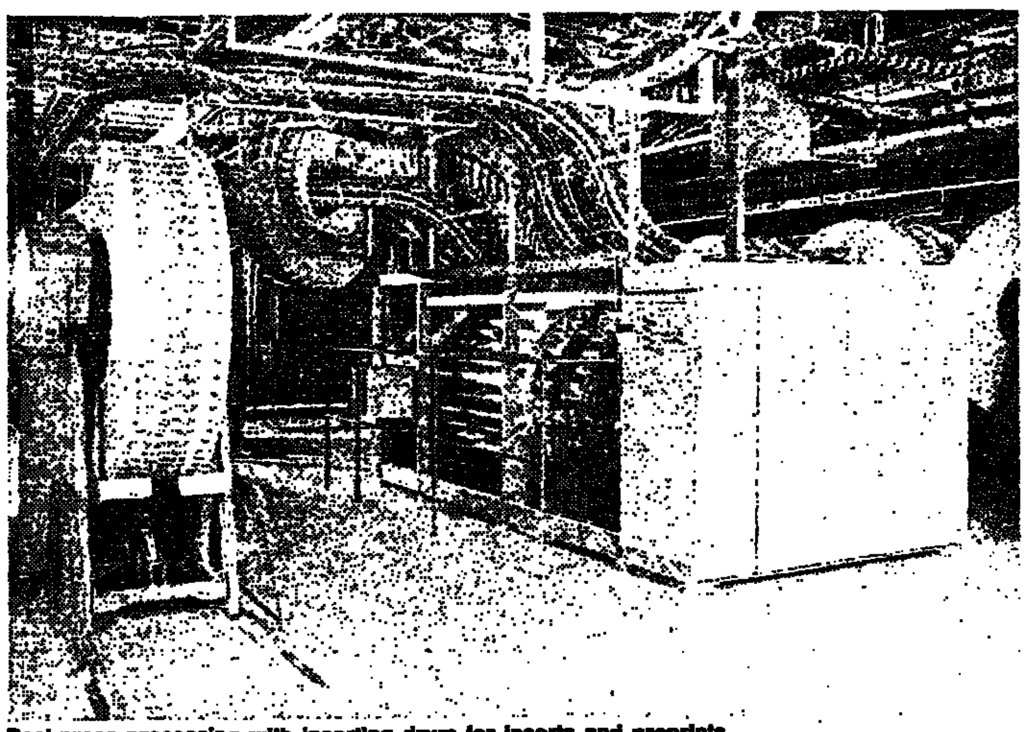
INSERTING

A leaf from the US book

THE NATURE of the British newspaper as an advertising medium could be about to change radically. Technology for inserting advertising material, separate regional editions, or just extra pagination, already commonplace in the US and West Germany, is on the verge of becoming a significant factor in the economics of the British newspaper.

Mirror Group Newspapers is spending £50m on sophisticated equipment from Ferag, the Swiss manufacturers of post-press processing systems for newspapers and plans to begin the inserting of advertising material in its three national newspapers sometime this autumn.

The MGN titles, the Daily Mirror, Sunday Mirror and People will be the first national newspapers in the UK to launch an inserting service, but they will be followed by The Financial Times and Mr Rupert Murdoch's News International Newspapers which publish five national newspapers ranging from The Times and Sunday Times to Today and The Sun and News of the World.



Post-press processing with inserting drum for inserts and preprints

Mr Frank Barlow, chief executive of the Financial Times, says the paper plans to use inserts sparingly — perhaps one a day.

Ferag has already sold 24 inserting lines into the British market, including two systems in operation at the Surrey Advertiser and the Glasgow Herald.

The UK is, however, a long way behind the US where inserting is a mature and very lucrative market.

According to industry research in 1970 a total of 7bn inserts were distributed by US newspapers. By 1987 the number is believed to have grown to 74bn pieces bringing in revenue of around $5bn for newspapers.

In the US, the market is dominated by newspaper inserters made by Harris Graphics which operate on the "carousel" principle.

A single machine which would be coupled in-line with the newspaper press is capable of inserting more than 20 pieces into the newspaper jacket at a rate of 20,000 copies an hour or 10 pieces at 40,000 an hour.

"Inserting has become a very high revenue earner in the US — in fact most daily newspapers have come to depend on the revenues earned from inserts," said Mr Martin Rickards, managing director of Harris Graphics in the UK.

"We believe that this has now been recognised in Europe, and that over the next 10 years there will be an explosion in the volume of inserts in daily newspaper," Mr Rickards added.

It is a view shared by Mr Jack Ferguson, deputy managing director of MGN who listed the benefits of inserting earlier this year at a Financial Times conference on the newspaper industry.

Apart from the ability to insert brochures, leaflets and catalogues Mr Ferguson emphasised the significant savings on investment in presses.

By producing pre-printed sections of the newspaper which are then inserted, as much as £2m could be saved on a 64-page tabloid press.

The pre-printing, which can also involve extra colour pages or special regional supplements, can be done in press down-time increasing efficiency and cutting the length of the pay-back of the investment.

The MGN executive emphasised that the inserting operation must be able to cope with the top speed of the press — something that Ferag had now made possible.

"Inserting drums now can operate at up to 80,000 copies an hour. This ensures that both the pre-printed newspaper sections and the commercial inserts are delivered into the main jacket of the newspaper in 'real time' to meet tight edition deadlines," Mr Ferguson said.

Apart from Harris Graphics and Ferag two other companies in the inserting business are Muller-Martini of Switzerland and Thorstead of Sweden.

Ferag has, however, more than 200 inserting lines installed in continental Europe — 150 of them in West Germany at papers such as Bild, Hamburger Abendblatt and Frankfurter Allgemeine Zeitung.

The market for inserting equipment is also starting to grow in other European countries such as Italy, France and Spain.

In the UK, Mr Ken Mansfield is media director of the WWAV group, an advertising agency specialising in direct mail.

Mr Mansfield already has clients who want to use newspaper inserting as a medium as soon as it becomes available in national newspaper in Britain.

Last year WWAV, a specialist agency with 60 per cent of its business in direct mail, sent out more than 100m items on behalf of clients.

Mr Mansfield does not believe that newspaper inserting will necessarily be a substitute for direct mail but will offer an additional choice to advertisers.

Mr Harold Lind, the media consultant, believes inserting of advertisements may be most effective in free newspapers, where a wider coverage can be guaranteed, than paid-for titles.

If there are too many inserts, then he believes "there is a strong possibility that the reader will shake the paper over the wastepaper basket before opening it".

Although the American pattern, where virtually all newspapers are local rather than national, may not necessarily be reproduced in Europe, a growing inserting market is likely.

Raymond Snoddy

PRE-PRESS

The double revolution

THE MOST fundamental stage of printing — pre-press — has been, until recently, "the forgotten area of the industry," says John Clegg, managing director of Wace, one the two leading pre-press companies in the UK. "For years nobody even knew what pre-press was," he adds.

That ignorance is now changing as analysts realise the importance of the sector. They estimate that the UK pre-press industry, which prepares text and photographs for publication, is now worth between £800m and £1.1bn.

"Pre-press is one of the most dynamic areas in the printing sector," says David Foster, media analyst at the London-based securities house, Kleinwort Grieveson. "What's more, the shape of the market is also changing rapidly."

Foster explains that the industry is undergoing what has been termed a double revolution. New digital technology is transforming not only the way the work is carried out but also the nature of the market itself.

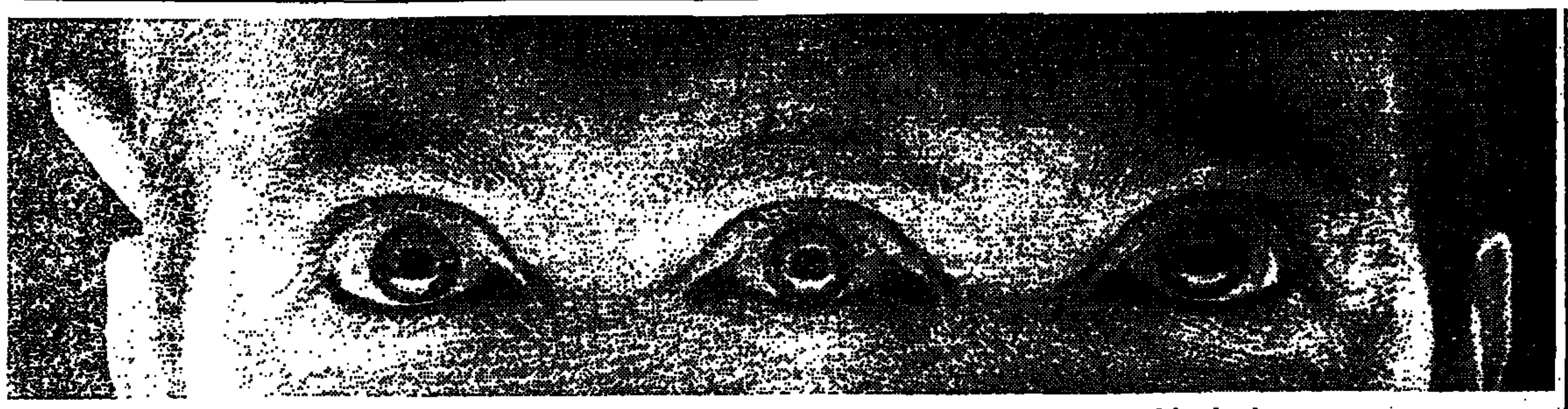
The results of the transformation can be seen in the growth of the London-based pre-press groups, Wace and Parkway. Between them they have purchased more than 30 companies in the last 18 months. There is little sign that their rate of acquisition is likely to alter.

The growth of these companies has been remarkable by any standards. Parkway's last half year results reported profits increased by 271 per cent. In 1987, Wace increased profits by 118 per cent.

"The key to their growth is new technology which has been changing what was essentially a cottage industry in to a high-tech sector," says David Foster.

He explains that most of the traditional family companies making up the pre-press industry cannot afford new digital processing techniques, which allow photographs and page layout to be altered by computers. A single unit, consisting of a colour scanner, two small page

Continued on page 12



Seeing things: image manipulation by Wace for, above, Honeywell Bull. Below, DHL's message was that it had an unfair advantage

Paul Abrahams profiles Wace

New digital technology the key

JOHN CLEGG, the joint managing director of Wace, a leader among pre-press companies in the UK, smiles as he describes a recent article in a US magazine announcing that his company was preparing for global domination.

"The article was ludicrous," he says. "Wace has only a small proportion of the UK market, and hardly has a presence in the US. We are capitalised at £87m."

Nevertheless, despite media hyperbole, analysts have been impressed by the rate of the company's growth. From being a shell in 1983, Wace is now the one of the fastest growing companies in an already rapidly expanding sector. Its clients include 17 of the top 20 advertising agencies; the other three agencies invested in its main competitor, Parkway.

Clegg, whose background is in law and in merchant banking, insists that the key to Wace's growth has been its willingness to embrace new digital technology.

He explains that the small traditional companies which have, until recently, characterised the pre-press industry have had neither the capital nor the inclination to invest in admittedly expensive equipment.

"The last five years have seen a quiet revolution in the press industry," says Clegg. "But only the larger companies with capital to invest have been able to take advantage of it."

Wace has developed a strong relationship with the suppliers of the new digital technology. In particular, the company uses equipment supplied by the British company, Crosfields Electronics, and the Israeli-based, Scitex.

These companies also use Wace as a site for beta tests, before the machines are made commercially available. Clegg says that on occasions he has had new technology six months before other companies.

Wace's phenomenal growth has not, however, been without certain potential management problems. The advantages of speed provided by the company's investment in technology is not sufficient, of itself, for finicky customers. He explains that quality also has to be maintained.

"Many successful companies in pre-press used to reach a certain size and then stop," says Clegg. "The industry is people-dependent, and the companies often lacked management depth to develop further."

He explains that these small companies were often dependent on three or four managers. If one was sick, or happened to be on holiday, the work tended to suffer, sometimes arriving late, or not reaching the required quality.

Clegg says that Wace has managed to overcome the traditional problems which plagued small pre-press companies through a decentralised form of management style. At the same time, he considers they have achieved important benefits from economies of scale.

As well as supplying high quality and fast service, he argues that Wace has managed to retain the important personal relationship between craftsman and customer. Many of the companies in the group are able to specialise in particular sectors. Clegg says that this allows them to gain the trust of the customers because they work faster and make fewer mistakes.

However, he also stresses the fact that digital communications within the group provides flexibility to cope with excess demand in one locality by transferring without difficulty to other areas, where business may be less brisk.

"We have managed to overcome the cyclical nature of the business," says Clegg. "Many companies have done too wide a range of business and become jack of all trades and master of none. We have the luxury of targeting and specialisation."

The system is also profitable. Clegg points out that fixed overheads for pre-press, such as buildings, machinery and personnel are high. However, once these have been met, raw materials are relatively cheap: by transferring work from one studio to another, each operation can be kept profitable.

Wace has managed to overcome one of the other main problems in the industry — recruitment and retention.

"We are able to offer talented people the possibility of capital investment for their companies. Five years ago it was possible to set up a pre-press company for very little. Now it's almost prohibitively expensive," he says.

Clegg believes that with the capacity to provide both speed and quality, the company will start to win large numbers of major contracts abroad for volume work. Wace has recently received an order for a Scandinavian catalogue because the company is now able to deal with large orders which small houses could not handle.

"We are winning work not just on service, but also volume," he says. "The catalogue project used to be given out to six different pre-press companies for preparation. But the quality from each company was different. The advantages of going to one house are obvious."

Analysts have been impressed by the willingness of the group to balance the requirements of an activity based on people with fixed assets in property. Citycorp, the UK off-shoot of the US bank, estimates that following recent successful applications for planning permission, its portfolio is worth at least £30m. Sales later this year should all but wipe out the company's debt.

Clegg is unwilling to talk about the opportunities offered by the sale of the properties, except to say that he wants to use them as a start to becoming the largest pre-press company in the world.

However, David Foster, a media analyst at the securities house, Kleinwort Grieveson, states that there is considerable scope for growth for UK pre-press industries on both the Continent and in the US.

He suggests that the UK industry is among the most competitive in the world. With the advent of digital transmission of data and images, the British pre-press companies should be well placed to expand abroad.

Foster believes that there could be particular opportunities in the US. Margins for UK companies entering the US market could be substantial. Although labour and raw materials are almost identical in the two countries, costs for US customer are three to four times as great as in the UK.

Turnaround times can be four to five days, instead of overnight, as they are in the UK.

CROSFIELD ELECTRONICS

Markets which do not technically exist

THE OBJECT of a stake-building exercise by Robert Maxwell, the ubiquitous British publisher, is seldom devoid of interest. De La Rue is no exception.

However, although its base industry is literally cash generative — the company is the world's largest printer of banknotes with 75 per cent of the world's market — last year it was its printing division, Crosfield Electronics, which generated most of the company's growth.

The expansion of UK-based Crosfield, whose core business is supplying technology for newspaper, magazines and pre-press industry, is a remarkable story.

As recently as 1983, the subsidiary made a loss of £6m. But by last year it was the main motor for growth in the group, with profits at £21m, a figure representing over 40 per cent of the groups total. Crosfield has evidently come a long way since it was purchased in 1974, with a turnover of £10m and profits of £1.2m.

"It's really very clever what has happened with Crosfield," says Terry Connor, publishing analyst with James Capel in London.

"De La Rue's core business, banknotes, was not in a big growth market. The company's market share was good, and although it was generating profits, the business was mature. The management decided to take a chance and invest its resources in higher growth, more risky business."

Connor explains that the basis of Crosfield's expansion has been through successfully exploiting a core technology and then exporting that expertise in to a wide range of applications.

The company has, in the past, specialised in the straightforward concept of scanning images for publishing, converting that information into an electronic signal, compressing the resulting data so that it can be quickly transmitted, and then communicating the information elsewhere for retouching or printing.

Crosfield's core activity, which is mainly based in electronic page composition for newspapers and the pre-press industry, has seen rapid growth over the last five years as the sector has been revolutionised by the type of technology the company has to offer.

The company exports 85 per cent of its products and is forced to compete against three other major players in an increasingly competitive market. They include Scitex in Israel, the German-based Hell and the Japanese company Dai Nippon.

Unusually, the Japanese, have not made inroads in this area of technology. Dai Nippon, for example, appears to have been handicapped by the Kanji character set and its failure to supply a credible text handling system.

Crosfield says that it has managed to maintain its position in the world market by its attention to state of the art technology and by providing a complete service. It claims, for example, that it is the only company to provide a total pre-press service for magazines and newspapers.

Analysts believe that the pre-press and newspaper arena looks set to continue its expansion as the advertising and publishing markets grow increasingly internationalised. They point out that the demand for high speed scanning, communications and printing is unlikely to slacken for some time.

Recent acquisitions have helped to rationalise the division's operations. James Salmon, managing director of Crosfield, explains that recent medium size acquisitions in the US, such as Hastech, should help to reduce its vulnerability to the vagaries of the dollar, which, in the past, has affected profits in both the US and Japan.

He points out that the additional floor space provided by Hastech should also avoid the problems of double shipping — that is shipping components from the US to the UK to be re-exported across the Atlantic. Analysts believe that the US forms 40 per cent of Crosfield's market.

However, Crosfield is looking to expand in to areas which have apparently little to do with its traditional areas.

"The interesting thing about Crosfield is not the growth of its traditional markets, but where it is leading the whole De La Rue group," says Terry Connor, at James Capel. "It is linking up with the group's other activities, printing and security, to take it into areas De La Rue would hardly have dreamt of a few years ago. They could be extremely profitable if they come off."

"De La Rue has been willing to take risks, using its technological expertise to move into markets which technically do not exist," he says. "That is unusual in a sector which has traditionally been as interesting as the food retail market."

De La Rue has used Crosfield's experience in data compression, storage and communication which it learnt in the pre-press industry to diversify into automated fingerprint identification — an area which does not appear to have an immediate relationship.

However, the company points out that there has been considerable cross-fertilisation. The storage of images, such as fingerprints, their graphic display and then transmission has considerable similarities to photographic retouching.

Printrak, De La Rue's US-based subsidiary, specialises in matching fingerprints and then automatically linking them to mugshots. The company, which was acquired by the group in 1981, moved in to the black for the first time in 1986.

"De La Rue's management has been willing to innovate and take risks," says Connor. "It's difficult to know how the new businesses will turn out. But in the past its return on research and development has been good." Analysts are unsure why Maxwell has taken a stake. They believe he is unlikely to make a full offer. He would then be supplying newspaper equipment to rivals.

One analyst believes that, if nothing else, one of the advantages of a Maxwell stake is that it tends to concentrate the mind of the company's management. Crosfield's management, however, appears to be having little problem keeping its mind on the job.

Paul Abrahams

Pre-press undergoing a double revolution

Continued from page 11

make-up systems and peripherals might cost £1.2m.

However, the larger groups, such as Parkway and Wace, have had the capital to exploit the technology. The four main suppliers are UK-based Crosfields Electronics, the German company, Hell, Israeli-based Scitex and Dai Nippon of Japan.

The technology provided by these companies provides a number of important advantages for users. Not least among them is the speed of the machines which are quicker and more flexible than traditional retouching methods.

Until five years ago, most retouching involved hand-held sable and air brushes — a time-consuming process. Now, an advertisement which might have taken two days can be turned round by modern digital machinery in six hours. Last minute changes can also be incorporated — an important consideration in the advertising business.

Art directors in the advertising industry also point that digital equipment can improve the quality of final output. As well as creating images which would have been next to impossible before, the computers can produce tones and contrasts for different sorts of paper to maintain final print quality.

Clegg at Wace says that the power of digital machines at the disposal of the large groups has allowed them to meet the demands of the advertising industry for flexibility, reliability and speed. "Only the new and sophisticated organisations have been able to take advantage of the new demands," he says.

Clegg argues that small companies will continue to loose market share at the high quality end of the market, because with traditional methods they cannot match the large groups' speed and quality.

He also believes that large media groups will find it difficult to enter the sector. Firstly, because the capital investment required makes cost of the point of entry high.

He says it will also be difficult for the large groups because customers demand the personal service provided by small companies, as well as speed and quality. Clegg argues that this combination can only be supplied by groups such as Wace, which use a decentralised style of management.

David Foster at Kleinwort Grieveson belives that the trend towards concentration of the UK pre-press industry can only accelerate. The introduction of digital transmission of pictures will allow the large groups to avoid the problems of a cyclical market, by transfering business from subsidiaries which are overloaded to those which are less busy.

Digital transmission will also allow the UK groups to continue their expansion abroad. Analysts point out that the UK industry is one of the most sophisticated in Europe and is well placed to take advantage of opportunities offered by 1992.

Wace and Parkway have both made acquisitions on the Continent which could allow them to feed back work to their UK bases. Future acquisitions might be in lucrative markets such as the US, Italy or Spain where the pre-press industries are still fragmented.

The West German market could also provide opportunities. Roger Gerhards, production manager in the editorial section of Hamburg-based Gruner + Jahr, one of the largest German printing houses says that the West Germany industry is also fragmented.

Gerhards explains that large publishing companies have often been unwilling to invest in expensive digital machinery, and that the small pre-press companies are unable to provide latest production techniques. He expects that the small companies will run into difficulties in the future.

That trend towards concentration may be accelerated by the increasingly international nature of the advertising industry.

"Multi-national companies, which advertise in 60 countries and use as many pre-press companies cannot guarantee equal quality," says David Taylor, one of the founders of Parkway.

Taylor believes that cosmetic and perfumerie companies, which are particularly interested in maintaining control over colour tones, will want to take advantage of the opportunity of using a single company to prepare their advertisements in the future.

David Foster at Kleinwort Grieveson believes the medium-term outlook for pre-press is good.

"The pre-press sector is tightly linked to the advertsing industry," he says. "The outlook for press advertising is *brighter than it has been for* the last 10 years."

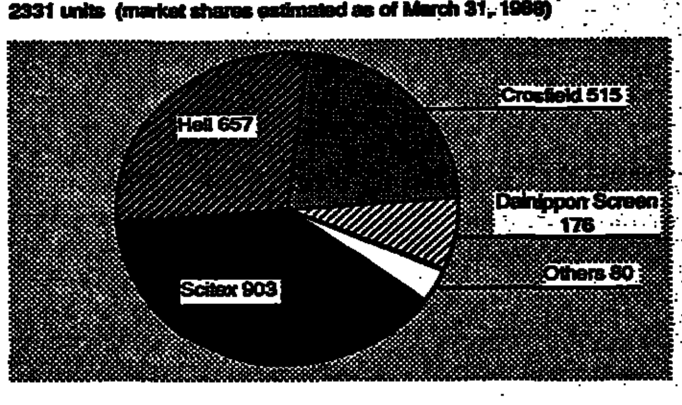
He points out that growth is dependent upon the volume of magazine and newspaper pagination, which at present remains buoyant in the UK. This year, the magazine market has seen an explosion of European-style products such as Best, Bella and New Woman. National newspapers have increased pagination and a number are also launching new magazine supplements.

Foster also believes advertisers may switch from television to print in the future. As commercial television becomes increasingly fragmented so its attraction for advertisers will decrease. Conversely, as the quality of reproduction in newspapers improves and lead times come down, so the press will become more appealing. Foster says that can only be good for the pre-press industry.

Paul Abrahams

Page make-up worldwide

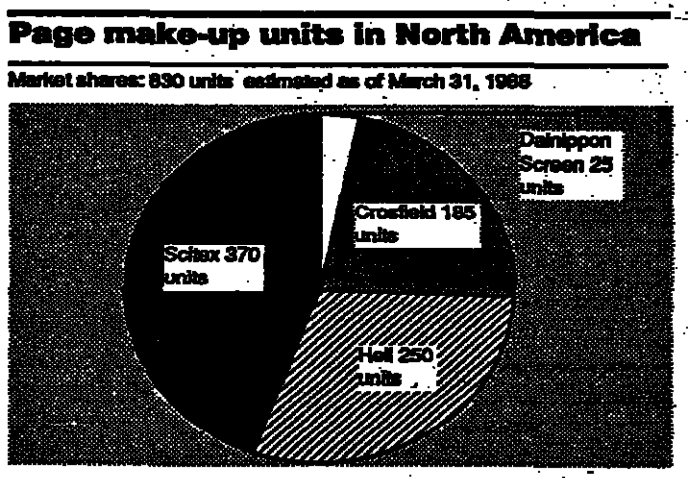
2331 units (market shares estimated as of March 31, 1988)



Source: Scitex Corporation

Page make-up units in North America

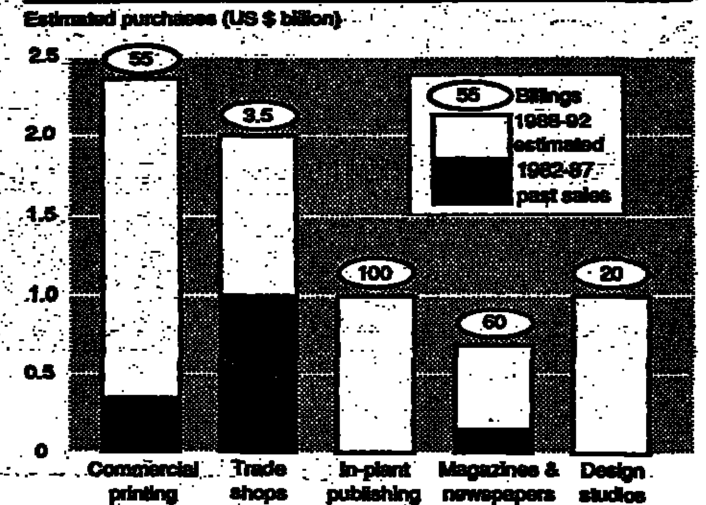
Market shares: 830 units estimated as of March 31, 1988



Source: Scitex Corporation

Colour prepress systems worldwide

Estimated purchases (US $ billion)



Source: Scitex Corporation

Boris Sedacca on the paper and board industry

UK production lags behind

THE CONSUMPTION of paper and paper products worldwide is growing steadily, but UK production is actually declining as the paper and board industry faces continual pressure from restructuring, international competition and fluctuating exchange rates.

The challenge of turning threats into opportunities demands co-operative research from within the industry, particularly in the application of new technology.

"It is a strange paradox that within the UK, we have some of the most advanced papermaking operations in Europe, yet it seems to me that we are lagging behind in the application of artificial intelligence," says Mr Don Attwood, director of the Paper and Board Division at the Printing Industries Research Association, (Pira).

Control systems are often less effective than they could be because sensors do not work properly or are out of calibration. Many systems hunt round the process mean and are manually over-ridden when rapid changes occur.

Operators correct defects by whatever means available and do not control the process by getting back to the cause of the defect.

Mr Attwood recognises this as a vast area which could be the subject of several research projects on wet-end control, the application of artificial intelligence (AI), the linking of AI to control, the use of control data for trouble-shooting, and many others — "there are some mills which are at the forefront of European technology, but the UK is the only world producer which has really suffered a decline in the output of paper and board."

West Germany in particular has the same sort of problems which the UK has in terms of a shortage of forestry - "but what the UK is very bad at is education," he says. "You find really skilled technical people in charge of paper-making operations in the rest of Europe, unlike the UK. The Germans are paramount in putting PhDs in charge of mills. In the UK we apply all the latest technology, but we do not seem to be all that good at it," he adds.

Western Europe has seen a 43 per cent growth in papermaking since 1970, while the UK is the only major world producer which has suffered a decline, although in 1965 Britain was the top West European producer.

The UK's share of West European production fell from 14.4 per cent in 1970 to only 7.8 per cent in 1986. According to Pira figures, the number of mills in the UK has declined steadily from 142 in 1976 to 96 in 1986, and the number of machines from 358 to 192 in the same period.

Manpower levels have fallen steadily from 57,000 in 1976 to 32,000 in 1986, yet output per man has increased from 71.3 tonnes a year to 123.7 tonnes in the same period.

The performance of the West German industry by contrast, is strikingly good, exceeding that of Japan and Scandinavia. The UK paper and board industry has started to grow again, mainly through foreign investment - 39 per cent of production capacity is owned by overseas companies.

Pira began a two-year project in 1987, for the development and application of a diagnostic expert system for the paper and board industry. Half of the cost is funded by Alvey. Pira claims that this is unique in that AI is being applied to long-standing industrial problems.

Statistical process control (SPC) is finding favour in the US and some UK companies are starting to show interest. The first area to apply SPC could be with attributes — this would be a particularly good area to start since most customer complaints relate to attributes, rather than physical or optical properties.

Pira is currently working with a group of other research associations and universities. Its main collaborative role is in the evaluation of the various methods for "knowledge elicitation," the process of obtaining the knowledge, rules and strategies from the expert which are to be incorporated in the system. This is one of the main stumbling blocks in building an expert system.

Ten projects are singled out for particular mention by the association for their high potential value in terms of lower costs or increased product value to the paper and board industry, ranging in size from 42,000 pounds to 200,000 pounds. They include:

1) On-line control of wet-end chemistry by developing on-line sensors for integration into process control systems.

2) End-product pulp specification, which aims to improve the selection, specification and purchasing of market pulps by developing assessment techniques which inform papermakers about end-product properties.

3) Performance polymers for high value webs to enhance the properties of high value fibrous webs, using cost-effective aqueous dispersions of multi-component systems.

4) Polymer systems for performance improvements of corrugated case materials to augment the strength and surface properties of liner boards, fluting and related products by the application of polymeric additives.

5) Evaluation of high quality office waste to assess the value and consistency of waste paper from offices.

6) Test instrument calibration to define procedures for paper and board testing instruments to national and international standards.

7) Dimensional stability of paper and board to identify and remedy the causes of dimensional instability of paper and board products.

8) Improved de-inking to improve the efficiency of wash and flotation de-inking systems.

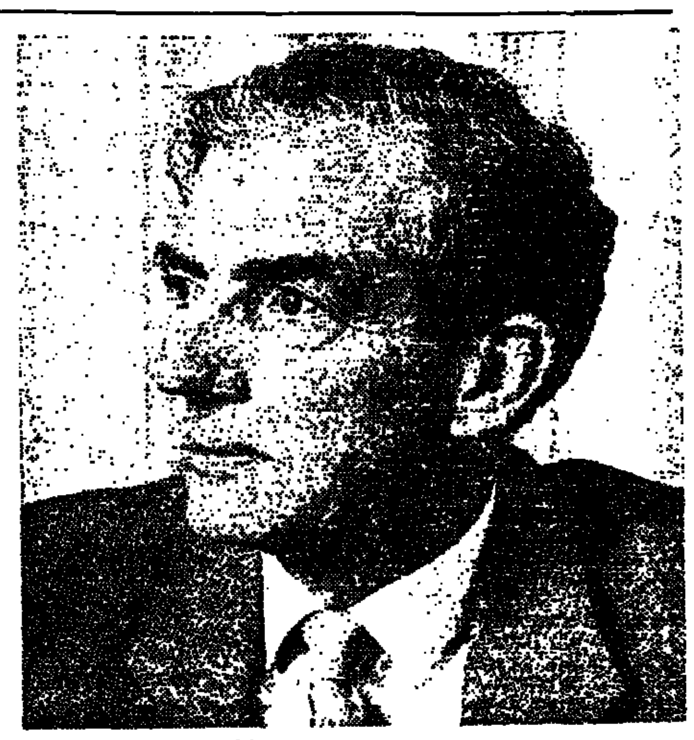
9) Melt-blown nonwoven technology to undertake detailed evaluation programmes on melt blown webs produced from various polymers.

10) Bonding systems for nonwoven structures to examine the product characteristics resulting from the application of hybrid entanglement/chemical bonding systems to different materials and webs.

"What we are trying to do is to encapsulate expert opinion so as to help people with productivity problems on their paper machines," Mr Attwood concludes.

"We are looking to improve productivity on a paper machine by reducing wastage. We want to draw up a proper specification to allow us to control the various machine functions.

"We are trying to write a mathematical model which describes the paper-making process so that anybody can interrogate a database to find out the sort of things that could affect it."


Mr Don Attwood: UK is bad about education

PRINTING INKS

Clean-up in progress

THE BLACK ink spread so widely on the fingertips of many newspaper readers is undergoing a drastic change, says a study of the $1.8bn annual market for printing inks in Europe.

"The last principal bastion of letterpress is in newspaper printing, using very cheap inks," says the report from analysts, Frost and Sullivan.

But letterpress systems are rapidly being displaced by more efficient techniques, giving way to lithography, which offers the advantages of cleaner, splatter-free printing and the option of printing colour economically.

The European market for printing inks will rise to more than £2.1bn a year by 1991 (in constant 1987 dollars). More than half the news ink now used is stamped on in letterpress, but the ink spray during printing, poor rub resistance, uneven intensity, and somewhat slower printing speed than lithography have now spelled its downfall.

In France, in fact, letterpress printing for newspapers has been completely displaced by lithography.

Though newspaper printing is close to the emotional heart of the printing industry, it is already far from the financial centre. By 1991, publications will account for only 24 per cent of the value of the printing ink used, or $518m.

Packaging, on the other hand, will represent $830 (or 39 per cent), according to the report. Commercial printing will be little more than a tenth of the total market by weight, or 65,000 tonnes in 1991.

West Germany, a country characterised by a large newspaper readership, will be a £673.5m market for printing inks by 1991. The volume of gravure ink used in West German publications, packaging and commercial printing is unusually high. Work that would be produced by flexography elsewhere in Europe is printed by gravure to meet German standards.

In the UK, ink for publications takes up nearly 47 per cent of the Britain's consumption by tonnage, a reflection of the country's high newspaper readership. There is also extensive use of flexography in packaging. By 1991, the ink market in the UK is likely to be worth around £202m.

Of the 200 ink companies throughout Europe, BASF of West Germany has the highest market share. The group is planning to invest £80m in the printing inks industry over the next two years. BASF's research programme is based mainly in West Germany and the US.

In the UK, £27.5m has been earmarked for expanding activities and manufacturing capabilities of BASF Coatings and Inks. Projects include a new printing ink factory at BASF's site at Stinfold, near Horsham.

Dr Robert Lambert, director and general manager of BASF's printing inks division says that "the current emphasis on web offset cold-set presses — as opposed to letterpress — has produced better print quality and definition in our national newspapers.

"The move towards non-rub inks was slow to begin. But by the end of this year, we anticipate dramatic improvements in cold-set printing ink technology. The era of newspapers with marginal rub-off has already arrived."

Today's new presses with electronic ink control and ink-regulating facilities from companies such as Hydrair of Droitwich demand inks of the highest quality for efficient printing.

Coates Brothers, the UK printing inks maker, this year acquired Lorilleux International, the industrial inks subsidiary of CDF-Chimie, the French state-owned chemicals group. The move will lead to the creation of a major European industrial inks concern with annual sales of FFr3.2bn (£550m) and ranking third in the international inks market - worth FFr40bn a year - after BASF and Dainippon of Japan.

Coates and Lorilleux will be exhibiting as a combined operation for the first time at this year's IPEX exhibition. The display will feature ink-drying techniques using ultra violet light and other radiation methods.

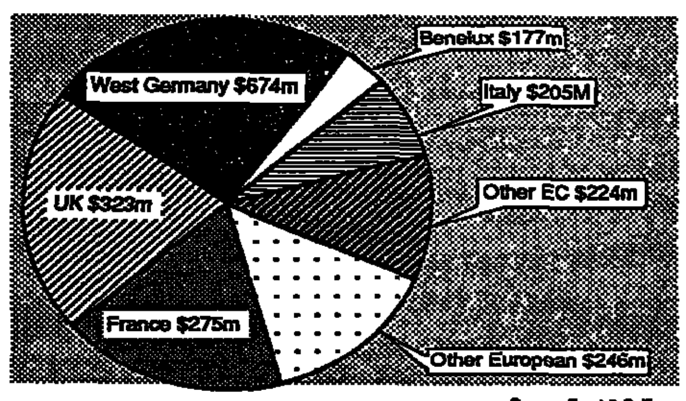
The use of ultra violet 'curing' systems continues to expand in the sectors of sheet-fed carton offset printing and in reel-fed self-adhesive label production.

"Printing Inks Market in Europe; Frost and Sullivan, 4 Grosvenor Gardens, London SW1W ODH.

Michael Wiltshire

West European ink market

Forecast by country- 1991.



Source: Frost & Sullivan


Part of the laboratory complex at Coates newest factory in Hong Kong

Progress in inkjet technology

Printing on an egg yolk

UNTIL 15 years ago, inkjet technology looked as though it was going to be nothing more than a footnote in the history of printing.

Although the idea of squirting ink on to a surface through a mechanically-controlled nozzle had been around since the last century, the practical problems involved in controlling the nozzle and the flow of ink defeated any significant commercial exploitation.

Micro-electronics has changed all that. Using a number of tiny electronically-controlled components, it is now possible to break up a stream of ink into tiny charged droplets of varying size and colour. These can then be accurately directed on to a range of different surfaces to form a printed image selected or designed using a small computer.

There have been two major areas of exploitation. In the industrial market companies such as Domino Amjet of the UK and Videojet of the US have developed systems for spraying lettering and images at high speed on to difficult moving surfaces.

Using a very different implementation of the same basic principle, a number of companies active in the personal computer markets, led by IBM, Hewlett Packard, Epson and Cannon, all offer inkjet systems for high quality, low cost printing.

The clear advantage of inkjet in the industrial market is that it is non-contact and can therefore be applied to surfaces of different shapes and consistency - even to the point where an image can be printed on the surface of an egg yolk without breaking it.

The principle application is printing "sell by" dates, batch numbers, bar codes and other variable information on products as they fly past on the production line.

Cambridge-based Domino Amjet was formed in 1978 and now has a turnover of £21m. Mr Mark Melling, marketing manager for Domino's marking and coding division, says that one of the principle reasons for the company's growth was the EEC law which stipulated that "sell by" dates must be printed on consumables.

The two rival technologies for printing variable information, hot foil and laser, both suffer from the disadvantage that reprogramming is difficult. Hot foil, the traditional method, is a contact method and so is much slower.

Domino also supplies systems for overprinting variable information on pre-printed products. The individual numbers on bingo tickets, Inland Revenue tax forms and newspapers are all printed using inkjet systems.

Mr Andrew Maclellan, managing director of Domino's graphics division, has high hopes for inkjet printing in the future. "It's very much an expanding market and very underdeveloped - people are only just beginning to see what they can do with inkjet."

One possibility is that stop press columns and regional news can be added to newspapers at the last minute. In the long term, however, the largest market for inkjet technology will undoubtedly will be for use with personal computers.

Inkjet printers are capable of much higher quality printing than dot matrix printers and are much cheaper and easier to maintain than high speed, high quality laser printers. Major vendors such as Hewlett Packard and Canon have also introduced colour printers.

Market analyst Romtec estimates that in 1987 the UK personal computer inkjet printer market was worth about £8m, a mere five per cent of the total PC printer market (£270m). By 1992 Romtec expects sales to be worth at least four times this amount per year, taking more than eight per cent of the market.

Following the launch this summer of the new high quality low cost Hewlett Packard Deskjet printer, they are now revising estimates upwards.

Ms Nicky Ayre, product manager for Hewlett Packard's range of inkjet printers, says that dot matrix printers traditionally make up the low cost end of the market while laser printers are used by companies which need high quality printing. The inkjet is now bridging the gap.

"People are aspiring to laser quality. But can't afford the technology."

Hewlett Packard's claims that most people do not notice the difference in print quality between its new Deskjet printer, costing £900, and a £2,000 laser printer.

Mr Tony Westray of Epson, whose SQ2500 is the largest selling inkjet printer in the UK by value, says customers choose inkjet for its all-round abilities rather than any outstanding feature. "Inkjet is nearly silent, it is high speed, and prints high quality."

Despite this, the market for laser printers is still growing faster than for inkjet printers, mainly because of the trend towards very high quality and the ability of lasers to print at higher speeds. However, lasers at present suffer from one important limitation: they cannot print in colour in the PC price range.

"Colour is a growing and potentially huge market," says Nicky Ayre of Hewlett Packard. "What we are waiting for is development of the colour photocopier."

She believes that when these become widely available people will start putting more colour and graphics into their documents, printing out on an inkjet printer and then copying on a colour copier.

At the moment colour inkjet printers are primarily marketed for presentation graphics and are not widely used.

The role of inkjet in the PC printer market in the long term is less clear. Laser printers use the same xerographic technology as photocopiers, so any advance in colour photocopying is likely to be followed by advances in colour laser printing.

With some inkjet products now offering printing speeds up to eight pages a minute, the advantages of laser or inkjet technology over each other will depend very much on the particular application, the price and the pace of technological development.

Andrew Lawrence

Paul Simpson describes how British magazine printers have ridden to power on the back of web offset technology

Titles come home as the sick man of Europe recovers

THIS YEAR Britain has nudged ahead of its main continental rivals, Germany and Italy, in the magazine printing business. The return of some titles to the UK, like Company and Elle, has set the seal on a recovery which has transformed the industry from being the sick man of European print at the beginning of the 1980s.

"We are nudging in front in price and quality," says Bob Gavron, chairman of St Ives, which prints 500 magazine titles. "The Germans have got too expensive. Their labour costs are too high, because they have a shorter working week and higher wages."

At the beginning of the decade, the British market was vulnerable to attack from German and Italian printers, who took advantage of lower unit costs, economies of scale from the greater size of their plans, and the weakness of some UK printers.

But gradually titles have been returning. Company, Natmag's women's monthly, returned from Italy to the St Ives group in 1986. Only a handful of magazines are now printed abroad, but that handful includes the two largest titles in the UK, Family Circle and Living, both still printed in Italy.

Now that both titles have been bought by IPC in a £28m deal, there is some hope that these too could return. Britain's biggest magazine publisher has traditionally strongly supported the UK print industry.

What has enabled the UK to fight back? The recovery is based on three main factors: investment in new technology, consolidation and rationalisation, and growth in the UK market.

In Italy and Germany, in particular, the market has been dominated by printer-publishers like Gruner & Jahr (part of the giant Bertelsmann group) which have been better equipped, financially, to invest upwards of £6m in gravure presses. There is also a greater concentration of long-run titles in Germany.

In the UK, gravure's last bastion is the Sunday supplement market, where the low rates of wastage and high speeds come into their own on very long runs. But in Germany and France it has 50.5 per cent and 25.8 per cent respectively of the magazine market. In the UK its share is under 13 per cent.

British magazine printers have ridden to power on the back of web offset technology (similar to that used now in national newspapers, except that the magazine printer uses heat to set the ink) in which they have invested heavily. Maxwell Communications has spent over £150m on presses for its magazine division to support contracts like the Radio Times. St Ives is now building a new £130m-plus plant at Peterborough.

The Peterborough plant will house a new kind of web technology known as "short grain". The term refers to the grain in the paper web. Traditional web cylinders are short and fat, with A4 magazine pages imposed so that the spine runs

Bob Gavron: "We are nudging in front in price and quality"

parallel to the web and the grain. Short-grain cylinders are long and thin, pages are imposed with the longer edge running across the web and the shorter edge — hence the term "short grain". The trade press often compares the two to an oil drum and a carpet roll.

Short grain's significance is that it could enable web to compete on long-run work like Sunday supplements. Productivity is variously estimated at 25-40 per cent greater than a normal web. Paper wastage is much lower, comparable to gravure on the very long runs.

Max Harvey, head of St Ives magazine division, has made no secret of the fact that he intends to attack the gravure market with the new presses at Peterborough. Not far away, in Corby, another large print group, HunterPrint, is building another new factory and investing heavily in the same technology.

HunterPrint is spending £28m restructuring its web offset division which will now be centred on a brand new factory in Corby. If all goes according to plan, marketing manager David Ritsema says the first short-grain web will arrive at the new factory on June 6 next year from Germany. A second short-grain web will arrive on October 30.

The UK is in the vanguard of the short-grain revolution largely because its leading web printers have a vested interest in attacking the gravure market in this country and in Europe.

Investment by other independent printers has matched that by the big four: MCC, St Ives, Norton Opax and Watmoughs. (Of the four, Watmoughs has committed itself most heavily to gravure with a new factory to print the Sunday Times supplement).

Thamesmouth Web Offset, an independent printer planning a stock market flotation in the new few years, has installed a 32pp Nebiolo web from Italy this year. Allan Denver, the independent web house which won the contract for the Murdoch empire's New Woman magazine, has bought three Baker Perkins webs since 1985.

The Kent-based Passmore group is currently thinking of buying a 32pp web for its Maidstone operation. Passmore is a good example of the rationalisation which has taken place this decade. This family print group was founded by two Victorian philanthropists in the late 19th century. The family influence remains, but the group has focussed its business much more tightly. The typesetting department has been closed as the market shifts towards specialist typesetters and copy coming in on floppy disc. The emphasis now is on longer-run work at Maidstone and short runs and export work at its plant at Radlett, Hertfordshire.

Sales director Nigel Passmore admits that some of the decisions have been hard to make, but they have paid off. Turnover leapt £2.5m last year to £24m. Exports now account for 15 per cent of sales, and the company has won a Queen's award for exports.

Magazine market by print process

	Sheet	Web	Gravure	Letterpress
UK (£m)	345	266	88	9
W. Germany (DMm)	854	713	1,934	330
France (FFm)	2,961	5549	3,031	196

Passmore is one of a small band of independent printers which have survived the 1980s without being swallowed up by their rivals. St Ives has led the takeover hunt, buying two of its biggest rivals, Chase and Riverside, for over £33m.

St Ives tried and failed to buy QB Printers from IPC. This company, IPC's last remaining print subsidiary, went to Robert Maxwell. Norton Opax acquired a magazine business when it took over McCorquodale for £155m in 1986. McCorquodale itself had built up its interest in this area by acquisition.

The rationale behind these takeovers is primarily a need to compete on a European and global basis with groups like Burda in Germany and Mondaori in Italy. But the cost of investment, at a time when a new web can cost anything from £2m to £6m, is another decisive factor. The fact that the once famous Garrods slipped into receivership shows what can happen to companies in this market which do not (or cannot) invest.

These takeovers mirror what is happening among their customers as IPC buys Family Circle and Living, Morgan Grampian, Link and Benns, join together within the United Newspapers group.

Mergers among publishers have not slowed down the expansion in the the UK market. Growth is still running at over 6-7 per cent a year in a market which is said to be worth almost £700m, according to market research organisation Papis.

Malcolm Field, managing director of W.H.Smith, which handles 40 per cent of UK magazines as a wholesaler, says sales are up. "The growth in price and volume is around 10-12 per cent a year. It's very difficult to split price and volume, but it's probably about 6-7 per cent volume growth in sales."

Papis figures for France and Germany suggest growth is much lower. In Germany, the market is said to be worth DM3.4bn and growing at 4.5 per cent, due largely to the consumer sector. In France, the market is worth FFr12.8bn but only growing at a modest 1.3 per cent this year.

It's no coincidence that publishers from both these countries have now moved into the UK market. Margaret Goldstone, managing director of Papis, says: "The sheer size of the magazine market in West Germany is making significant growth in the home market difficult to achieve for publishers."

Gruner & Jahr and Henrich Bauer have stood the conventional wisdom in the UK market on its head with mass market titles like Prima and Bella selling well and stemming the trend towards specialist niche publishing.

The French publisher, Hachette, has preferred co-operation, forming a joint venture with News International in the UK to promote Sky and Elle. IPC's latest women's launch, Marie Claire, is another *Anglo-French joint venture.*

IPC chief executive John Mellon says that, while the Germans stimulated the "global publishing" market, they did not invent it. "There's nothing new in franchising titles. America's been doing it for years with titles like Cosmopolitan.

"What we're seeing is large companies extending their areas of operation by developing their business. We're bringing together a French brand name and expertise and our experience in the UK market."

IPC plans to take this experience and apply it to other *countries.* Essentials, its most successful launch of 1988, has been franchised to Italy and Canada. It will be published jointly in France under the title Advantage.

The lesson is also being applied to a specialist title like New Scientist, which will be printed in Melbourne, Australia, from October. "We're entering a global village," says Mellon. "As companies develop, you are bound to see more cross-border activity."

Will all this cross-border activity benefit British print? Monadori is likely to pick up the contract for the Italian Essentials, and is strongly placed for the French edition.

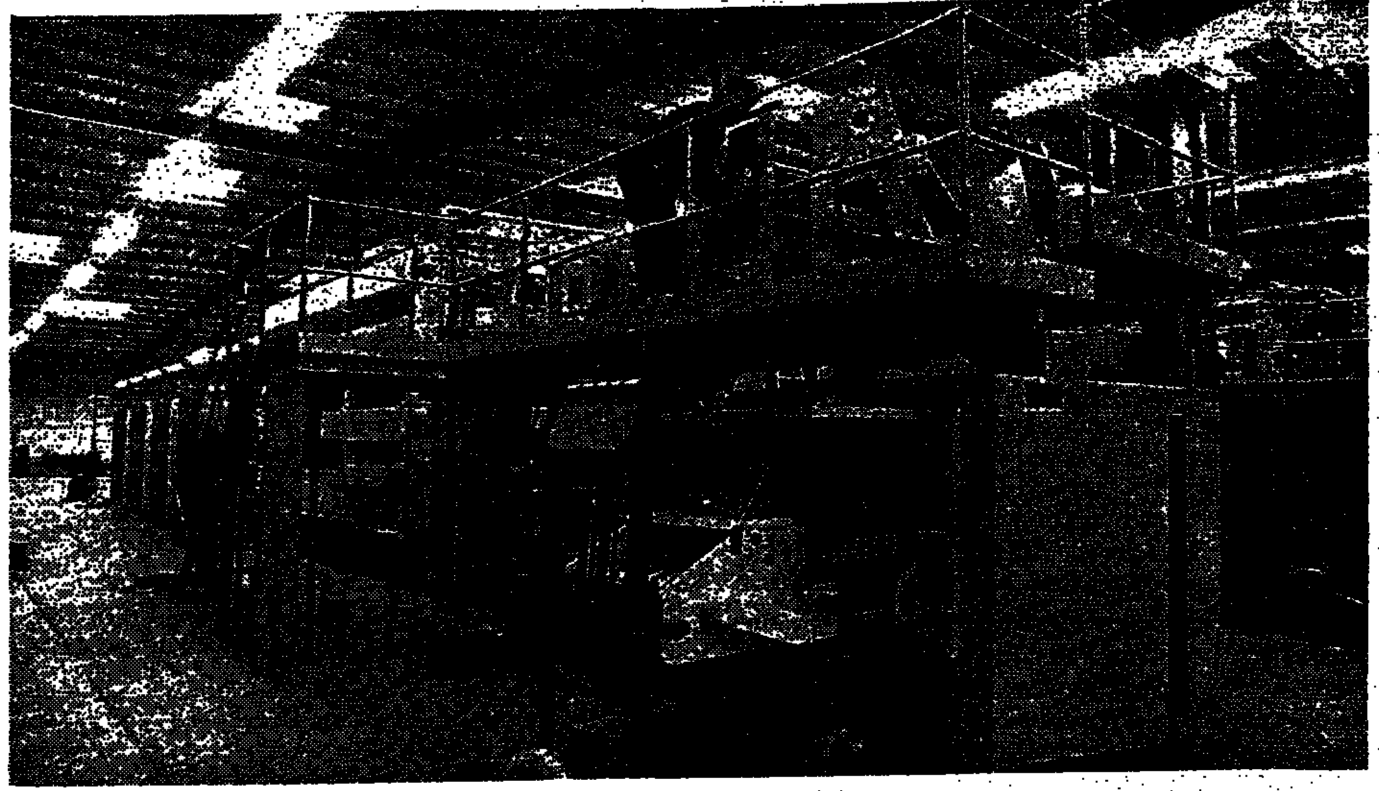
Mellon says each contract will be awarded on its merits.

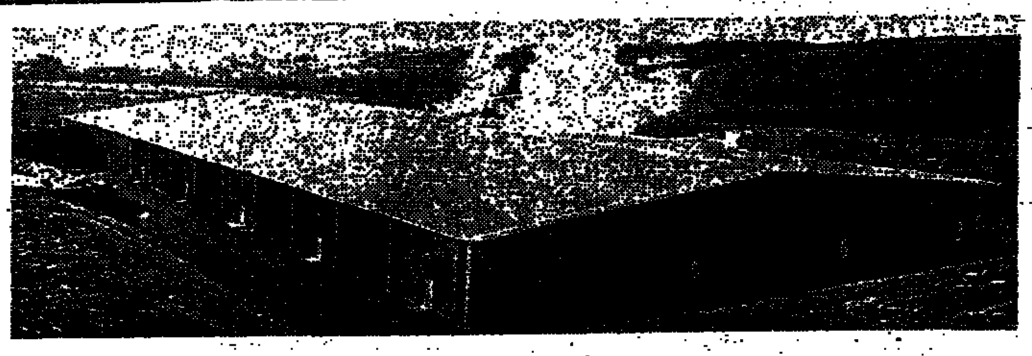
But British printers hope to compete by growing overseas. MCC now has magazine printers in the UK, US and France. (One of its biggest contracts in the US is for a large chunk of the run for TV Guide, now owned by Robert Maxwell's long-time sparring partner Rupert Murdoch). St Ives, when its turnover tops £300m, is contemplating European expansion.

The immediate target, though, is to win the giant contracts for the German mass market titles, Prima, Best and Bella. British printers hope that advertising pressure on turnaround times will persuade the publishers to print in the UK. They look to Elle as an example.

Elle switched from a French printer to St Ives less than a year after its launch in the UK. The difference is that the German publishers are also the largest magazine printers in their country. Company pride and the lowering cost of printing in-house would probably prevent them moving to the UK.

The writer, Paul Simpson, is Editor of Lithoweek magazine.





Chase Web Offset, once a rival to St Ives, is now part of the St Ives group, which prints 500 magazine titles. Its completed 80,000 sq ft building, by John Reid & Sons, of Christchurch, houses its printing facility at Plymouth

BOOKS

Crafts have gone but litho excels

THOSE WHO bewail the declining standards of beauty and legibility of today's books, compared with the best of pre-war production, certainly have some justification.

Margins are narrower, the paper is thinner and less apt to lie flat. Typesetting errors are more frequent and there is little sign of the elegance and distinction of typographic design that used to permeate the publishing world from the private press movement.

However, there has been an immeasurable improvement in the quality of both monochrome and colour illustrations in mass-produced editions at reasonable prices.

Topical books are produced with almost uncanny speed, paperbacks catering for an ever-increasing range of interests are still relatively cheap, there are far more publications in the category of "information printing", and there is no longer any particular problem in producing scholarly works using special scientific or linguistic signs and symbols.

If all these changes had to be attributed to a single cause, the most prominent and influential of all technical factors must be the almost universal change-over from letterpress printing — with pieces of type and photo-mechanically engraved blocks for illustrations — to offset lithography, familiarly known as "litho", which prints from a flat plate bearing the images of both text and illustrations for a set of eight, 16 or more pages.

The relief printing process for book printing survives almost exclusively in the field of paperbacks, where moulded or etched rubber or plastic plates are used to print from liquid inks on high-speed rotary presses incorporating numerous finishing processes (slitting, folding, cutting into sections) by a process known as flexography.

This has little in common with traditional letterpress printing since it employs flexible plates (hence the name "flexo") and the printing machinery used is similar in appearance to that of reel-feed or "web" offset-litho.

Litho printing, both sheet-fed and web-fed from the reel, has gone hand in hand with technical progress in the fields of colour reproduction and typesetting, since the production of litho plates, like that of present-day typematter and four-colour separations for printing, is basically a photographic process.

Purists might object that, for sheer clarity of text, the offset-litho process can never equal traditional letterpress. A visit to the British Museum or the printing library of the St Bride Institute in London to inspect the finest work of the great printers of the past might persuade the reader to accept this view, but it is unrealistic.

For all but the wealthy collector, the days of fine craftsmanship have gone.

The economic reasons become obvious when you consider that even the fastest letterpress machines, built in about 1960, could not go much beyond 2,000 impressions an hour, *while modern sheet-fed* litho presses print at 10,000 per hour or more as a matter of routine. And this in four colours and on sheets measuring up to 1 x 1.4 metres.

Quality standards are bound to vary

Quality standards are bound to vary, but results of annual competitions run by two weekly printing trade magazines demonstrate that the best litho bookwork is impeccable.

Visitors to Ipex will probably find the stands of the larger sheet-fed litho press manufacturers the most interesting from the general reader's point of view.

In addition to straight multi-colour machines, most manufacturers now have "convertible" presses which can be quickly changed over to print one or more colours on both sides of the paper in one pass, a process known as "perfecting." This dual purpose has obvious advantages for the bookprinter.

In the world of bookwork, where runs are relatively short, speed of change-over from one job to the next is just as important a factor as sheer running speed.

Electronic aids to "make-ready" in the form of ink settings and plate positioning for true register have enabled these downtimes to be reduced from more than three hours for a large multi-colour job to one hour or less, and data may be stored on computer disc for the instant set-up of reprints.

Printing quality ultimately depends on the quality of the paper. The rising cost of this material is closely associated with energy costs, so that the publisher or printer must buy for economy if paper costs are to be kept below 50 per cent of the total production cost.

Even with the best available paper, the binding may be less than satisfactory. Modern binderies now largely use lines of continuously operating equipment, whether for paperback or hard case binding, once the basic "book block" has been produced.

This may consist of sewn sections but more often comes in the economical form of adhesive binding, paradoxically known in the trade as "perfect binding", for which each section is chopped off at the fold so that individual pages can be glued together in one lump. This process accounts for the difficulty in *opening some paperback* volumes and most of the problems associated with books not lying flat.

Paper is a living material which reacts to the atmosphere throughout its life. Where the correct "grain direction" of the pages, from head to tail of the book, has been changed into side-to-side for reasons of economy in printing, pages may be expected to fan out, cockle and generally behave obstreperously. This is a fault most often associated with web-fed printing.

To most people, "new technology" in printing means computerised typesetting, since this has been the main point of dispute in the newspaper world.

What computer typesetting means in effect is that the keyboarding operation, generally carried out on equipment in the Personal Computer category, has become easy, the skill being built into the computer in much the same way as a chess-playing computer is programmed to follow fixed rules and react to given situations.

Correction is carried out (in theory) before the typematter is output, using the display on the screen above the keyboard. It is not surprising that the economies of time, and notably of wages, offered by such equipment has led to a decline in both proof-reading standards and observance of the finer points of typography.

The much-heralded technology of desktop publishing simply brings these techniques, together with the digitised input of monochrome illustrations and proofing or short runs on a laser printer, within the reach of the publisher or author.

In practice, DTP has been accepted mainly for "corporate publishing" of commercial and industrial information and is unlikely to be suitable for conventional bookwork except in the scholarly and scientific field.

Another technical advance of marginal interest is that of "demand printing" on giant xerographic machines. These operate on the same principle as office copiers but from digital data and printing on both sides of a large number of pages, complete with collating at the end.

Thus, in theory, an edition of one copy comprising minor corrections is possible. The technique has been found suitable mainly in the field of spare parts manuals and other listings.

All these techniques, *together with the seemingly* miraculous production of fully assembled and corrected pages of colour separations, may be seen in action at Ipex.

Greater speed and versatility of production may have involved some loss of standards of craftsmanship but prices are still relatively low and methods of stock control and distribution have vastly improved — where proper use is made of computer systems.

If book prices still seem high, please do not blame the printer. It is quite common for production costs to account for as little as 15 per cent of the retail price of a book.

One cannot fairly blame the publisher either, since publishers often have to allow discounts of 50 per cent or more to the major retail outlets. In *these commercial circumstances,* the imposition of VAT on books would be a disaster for all concerned, starting with the reader.

Andrew Bluhm

Raymond Snoddy explores the extraordinary Maxwell empire

Eyes on the Tunnel and exports

LOCAL PEOPLE call the old Odhams gravure printing plant on the outskirts of Watford, Herts,"the cathedral" because of its flamboyant green spire.

The spire is still there, even though the inside of the building has been completely transformed and turned into one of Europe's largest and most modern newspaper printing plants, at a total cost of £160m.

The Watford plant is the centrepiece of Mr Robert Maxwell's plans to have his three national newspapers all printed in colour throughout the country by the end of this year, or very soon after.

It is a spectacular experience to walk through the enormous press-hall where nine of the 10 computer-controlled Man-Roland Colorman web-offset presses, each capable of printing up to 70,000 copies an hour, are already at work producing colour editions of the Daily Mirror.

By the end of July, the Watford plant was turning out 2m copies a night in the highly automated plant and had taken over entirely from the old black and white presses at the Mirror's London headquarters at Holborn Circus.

A total of 21 Colorman presses has been bought in a modernisation programme costing around £230m. Apart from the 10 presses at Watford, there are two at Stamford Street, in central London, with six destined for the company's northern plant at Oldham. The final three presses are being held in reserve to see where the greatest demand for printing capacity will turn out to be.

To Mr John Halloran, chief executive of all Mr Maxwell's printing operations outside North America, the investment in the new newspaper plants, complete with sophisticated inserting equipment, is an example of how the printer can add value to the product of the publisher.

The capacity of the plant is so enormous that, apart from the contract printing of local and regional papers, Mr Holloran, who is responsible for both BPCC, the commercial printing company, and BNPC, the separate Maxwell newspaper printing arm, is beginning to think about the possibility of exports — once the Channel Tunnel has been built.

The range and diversity of Mr Maxwell's interests — everything from running satellite television channels to first division football clubs — and his grandiose ambition to have a £3bn to £5bn turnover by 1990 tends to obscure the fact that at the heart of the Maxwell Communication Corporation is a successful printing business which has arisen out of the loss-making BPC in the past seven years.

The company is now the largest contract printer in Europe and the second largest commercial printer in the US.

Last year the entire printing operation had pre-tax profits of £66.2m on sales of £669.4m. This compares with pre-tax profit of £52.2m on sales of £184.4m for worldwide communications and publishing.

Between 1982, soon after the rescue of the old BPC, and 1986 around £100m was invested in the groups most important printing plants — Odhams-Sun, Furnell, East Kilbride, Petty, Carlisle and Pulman. Their major contracts include the Radio Times, TV Times, many of Reed International's women's magazines and Reader's Digest.

In the US the acquisition of Diversified Printing Corporation brought with it a 12-year contract to print 31m copies each week of Parade magazine, the most widely circulated Sunday magazine in America.

BPCC, with a total staff of 7,370 is also a significant player in the security printing market, including everything from cheques to financial documents.

Mr Halloran, who has worked in the printing industry for 19 years, believes the industry is going to become increasingly polarised between the large companies which can afford to invest in the latest technology and companies occupying specialised niches.

"The market is going to be driven by a few major players. You have got to offer low unit costs to people buying big print runs and you need to be able to offer one stop service," says Mr Halloran.

The company is pursuing a vertical strategy of being able to offer everything from paper through to electronic communication.

The main round of investment and acquisition on the printing side of the Maxwell business is probably now nearly complete, although there is likely to be further expansion in continental Europe to add to a controlling interest in Francois and a stake in Del Duca in France.

The main thrust in future is likely to concentrate on expanding the publishing side of Maxwell Communication, for example through the $2.2bn offer for Macmillan in the US.

Mr Derek Terrington, printing and publishing analyst at stockbrokers Phillips & Drew, in a recent assessment of Maxwell Communication, wrote of the large and profitable printing operations in both the UK and the US, while raising some question marks about the Grand Strategy of trying to become a £3bn-£5bn operation.

Mr Terrington concluded,however, that by next year pre-tax earnings could reach £190m and possibly £215m.

And, although there is no sign whatsoever of any fall-off in the demand for print, the Maxwell empire has also made a two-way bet on the longer term future by increasing its investment in data bases such as Pergamon Orbit Infoline and the development of electronic publishing using CD-ROMs — compact disc read only memory.

Compact discs are more familiar to the average consumer for their high quality music reproduction but CDs can hold,in digital form, an awesome amount of information.

Pergamon Compact Solution,one of the Maxwell companies in the electronic information field has put the entire 10-volume, 1,448 article International Encyclopedia of Education on a single compact. In fact a normal size CD can hold up to 500 megabytes of text and graphics the equivalent of nearly 100,000 printed pages.

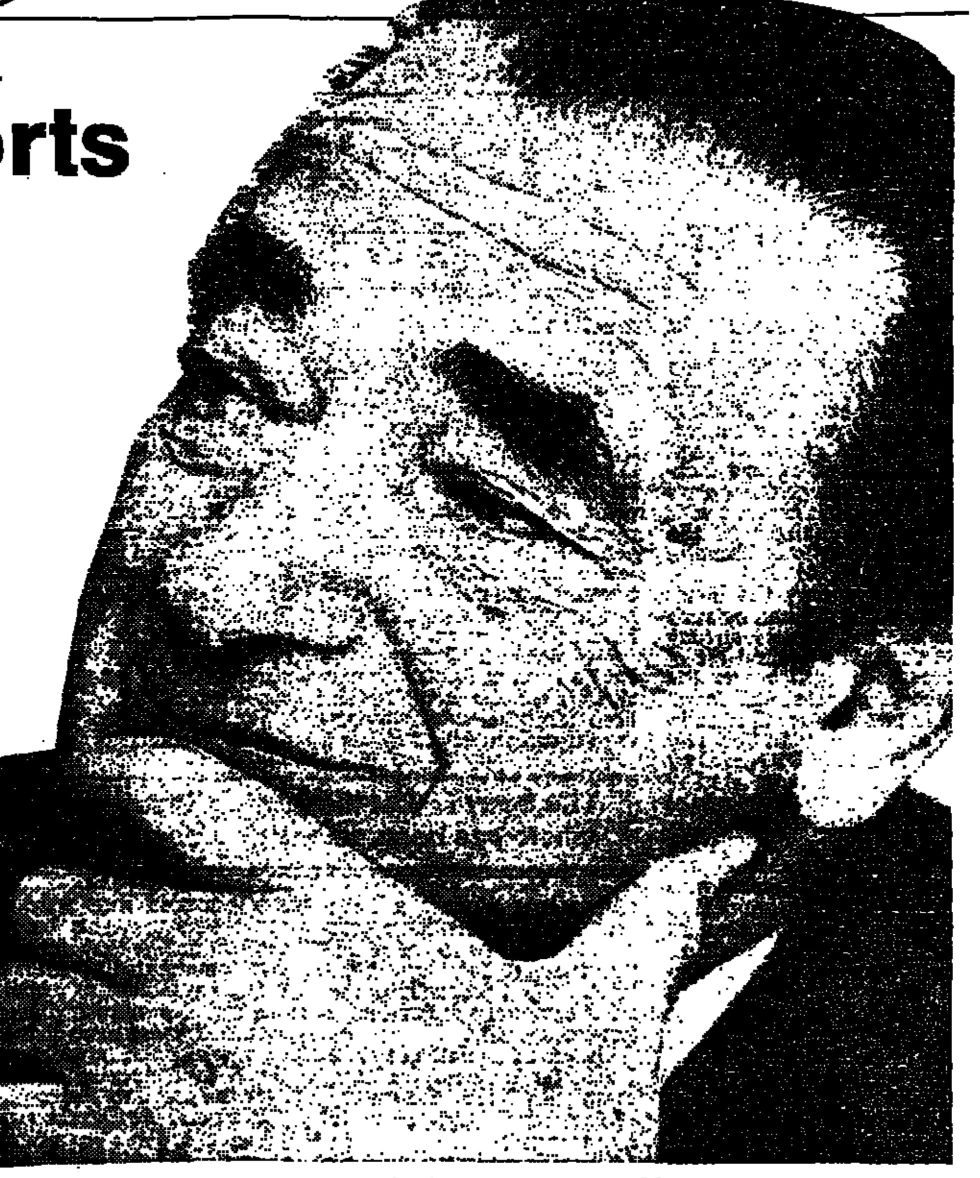
Graphic Knowledge Retrieval System software allows the user to search for any word of phrase in the encyclopedia and look at related material by pointing a "mouse" to cross references in the text.

The system uses an IBM, or IBM-compatible personal computer with CD-ROM drive. But perhaps the most dramatic example of the work of the company, part of the Maxwell Communication Corporation can be seen at British Airways.

Pergamon has turned the entire 18,500-page service manual for the Boeing 757 into digital form and it is all contained on less than half of a single 5-inch CD.

The system is now undergoing trials at BA, but Pergamon says that mechanics like it and that other major world airlines are interested.

A wide range of applications is envisaged seen for the technology in areas such as education, business,the military, and industrial as well as aerospace for cumbersome reference books and manuals.



Mr Robert Maxwell: a successful print business is the heart of his worldwide organisation

PROFILE: MONOTYPE

An old name shines again

THE STORY of The Monotype Corporation, a company set up in 1897 to supply the printing industry with typesetting equipment, could so easily have ended as a very British corporate tragedy.

A once famous name, with an international reputation for the manufacture of typefaces, typecasting and typesetting systems, had failed to keep up with the speed of technical change and seemed doomed as its debts grew.

The problems, according to Mr John Hollowday, acting chief executive, stemmed from the company's decision in the 1960s not to move from hot metal setting into cathode-ray tube technology.

"They believed the quality was poor and not up to Monotype standards and decided to stay in hot metal. They ignored the fact that CRT typesetting was extremely effective and very fast compared with hot metal.

"They backed the wrong horse by believing that the quality concept was the right one to follow," says Mr Hollowday who is also finance director of Monotype.

By 1980, after Monotype had been owned for a time by a property company and was the subject of a rescue package put together by Barclays Bank and the National Enterprise Board, losses were continuing and the company faced bankruptcy, the present management says.

Since then there has been a transformation in the outlook for Monotype. This month it will introduce a variety of new products at the Ipex exhibition and pre-tax profits for 1988 have been estimated at £5m, although this is slightly lower than expected because of the cost of developing new products.

Mr Derek Terrington, publishing analyst at stockbrokers Phillips & Drew, believes profits should rise to £7.2m next year on sales of £50m.

Mr Hollowday and Mr Roger Day, former chief executive of Cambridge Instruments, decided to take on the task of trying to turn the company round because of the "seams of gold" they found after a close examination of its assets.

"When I had a look at the company for Roger Day, I told him there were so many good things here that some of them had to work," Mr Hollowday explains.

The "gold" included laser-based typesetting technology developed by Mr David Hedgeland, now the company's technical director; copyright on more than 800 typefaces in increasing demand by computer companies; and an extensive international distribution network, most of it wholly owned.

To stem the losses drastic surgery was also needed to bring the cost structure of the company more in line with its market share.

"You shut off the taps where money is dripping away. You shut off anything that looks like privileged or vested interests, and you set up an austerity regime which most staff and trade unions don't object to if they know it is in a good cause," Mr Day explains.

Products using old technology or where the prospects for growth seemed limited were scrapped, with accompanying redundancies.

The total number of employees was reduced from 1,400 to about 700 mainly by the closure of the Monotype plant in Dunfermline and the consolidation of manufacturing at its headquarters at Salfords in Surrey.

By 1982 Monotype had returned to profit, something that had not happened for about 10 years according to Mr Hollowday, and a year later debts of more than £8m were removed and new capital of £1.5m injected by institutional investors.

Curiously, in the process of reconstruction there has been an almost complete role reversal between Monotype and its old sparring partner Linotype.

"We have become a newspaper company and they have taken more of the commercial market," Mr Hollowday says.

Monotype's strong move into the newspaper market was based on laser image setters using the process known as rasta scanning.

The horizontal scanning device can handle a complete newspaper page, pictures and graphics as well as text in about a minute.

The equipment is used by 239 newspaper titles around the world, including all but two Paris dailies and the Financial Times in its new Docklands plant.

The Monotype approach has been to avoid producing totally integrated typesetting packages and has instead concentrated on producing systems which can be used with more than 60 different "front end" or information input systems.

The Monotype Prism, a new low-cost imagesetter

The company has also been moving out from its core business activity and adding expertise on communication of data and pictures to the composition of page images.

Since 1986 there has been a string of small strategic acquisitions, many of them involving software companies with a clever idea but which were under-capitalised.

The acquisitions have included: GB Techniques, a UK-based front end supplier based on personal computers; Intertec, a company specialising in digital picture storage systems; and Scientex, a company involved in desk top publishing, an area Monotype believes will show considerable growth.

Monotype has also acquired Graphic Systems Equipment, a leading French typesetting equipment supplier, and formed a joint venture with Commandercom, a company supplying integrated communications control systems for data handling networks.

In June Monotype announced that agreement had been reached with Adobe Systems of the US for the manufacture and sale under licence of the PostScript page description language which has become an industry standard in corporate and commercial publishing.

The company hopes that the PostScript system, which can be "retrofitted" to its existing Lasercomp systems, will open up new markets particularly in the US.

At the Ipex exhibition Monotype will also unveil a system which gives full colour output of newspaper and magazine quality with existing Lasercomp and Pioneer image setters.

"We are in there with the right product at the right time. Colpour is the direction most newspapers want to go," Mr Hollowday says.

Monotype will also introduce a new low cost image setter, based on laser diode technology aimed specifically at the corporate and commercial publishing markets.

In a study of The Monotype Corporation at the beginning of this year, Ms Louise Barton of stockbrokers Laurence Prust said of the company: "Under the stewardship of the current management team Monotype has skilfully exploited its technical leadership in the typesetting market over this decade to transform the group from financial oblivion into one of the most profitable companies in the industry."

John Hollowday is more cautious, but after the years of struggle he says: "I cannot think of any circumstance that would lead me to be at all pessimistic about the future of Monotype."

Raymond Snoddy

PROFILE: ITEK IN THE UK

Scanner wins an award

THROUGHOUT the printing industry, graphics reproduction is undergoing a technical transformation as new graphics systems stream into the market to improve the quality of printed products.

Among the leading innovators in this field is IGX Corp., the multinational pre-press and graphic equipment manufacturers. David Wells the managing director of Itek Graphix, the UK division of IGX Corp., claims that his company is "the IBM of the graphics industry."

With revenues of $30m in 1987, contributing to IGX's worldwide turnover of just over $200m, Itek is only a fraction of the size of the computer giant, but has adopted similar attitudes that gave 'Big Blue' dominance in computer markets. Like IBM, applying the latest technology into marketable products has been a feature of IGX success.

In 1907, a forerunner of IGX, the Gregory Commercial Camera Company, invented the first photostatic photocopier, putting the word 'stat' into office language. In 1979, the company developed the first daylight operating camera to move pre-press operations out of the darkroom.

This year, a series of innovations in colour separation scanners led Itek Colour Graphics, a sister company of Itek Graphix, with its research and manufacturing based in Cheltenham, to receive the Queen's Award for Industry.

David Wells has taken technical innovation a step further with a concept of visual communications. Eschewing the word 'printing,' he explains: "Visual communications is more than just reprographics. It's a systems approach that permits companies to take a concept through the design stage to the final printed output.

Itek Graphix is in the forefront of this field because it saw the way in-plant printing in medium-to-large businesses was developing — "the expansion from being print shops to graphics centres was a logical development for many companies as the demand for quickly-produced, high-quality publications has risen dramatically, especially in the financial sector," says Mr Wells. Itek Graphix's client list in this area now numbers more than 70 in the City of London alone.

Unlike many manufacturers in the graphics industry, which concentrate on one type of technology, Itek believes the future is in diverse technical capabilities.

Although developments are proceeding even faster with colour photocopiers, David Wells feels that many manufacturers of these machines are not really competitors because the quality of reproduction, to a trained eye, means that they are still designed for a different type of market.

"We have three areas of technology: graphics cameras, developed and manufactured in Rochester, New York; composition systems designed for page layout and typesetting (developed and manufactured in Nashua, New Hampshire) and our UK-originated colour scanning equipment," says Wells.

The diversity of technology and the desire to provide a better visual communications in industry appears to have been a major influence in the announcement on August 16 of the acquisition of IGX Corp by A.B.Dick for $150m.

A subsidiary of GEC and one of the world's major press manufacturers, A.B. Dick appear to see the move as a way of improving their profile and technology base.

There are obvious synergies between the two companies. In the US, IGX Corp. hold 50% of the market for paper platemakers in 'quick-print' installations and A.B. Dick manufacture 70% of the presses in the same sector.

Forecasts for the current financial year place Itek Graphix revenues at $41m, rising to $55m in 1989.

Philip Minshull

Forthcoming FT surveys

THE IMPACT of new technology in various areas of business and finance will be *highlighted in a series of FT* surveys in the coming months. The topics include:

■ **Mobile Communications**, (Monday, September 12): the rapid expansion of the mobile cellular telecommunications market in Scandinavia and Britain has demonstrated the *strong underlying demand* for car phones. Sales throughout Europe are now rising strongly.

■ **Personal Computers and Software**, (Monday, September 14): The personal computer industry is in its most volatile state for three years, with IBM, the world's dominant computer manufacturer, and others, attempting to change the hardware and software standards.

■ **Office Equipment and Services**, (Wednesday, October 19): office managers are now far more aware of the need to integrate equipment, particularly with the convergence of computer and communication technologies.

■ **Information Technology in Finance**, (Thursday, November 10): Electronic technology is a vital key to success in financial services. *The question now is how to* use new systems to gain competitive advantage.

Detailed editorial synopses for these and other forthcoming FT surveys are available from the Financial Times, Bracken House, 10 Cannon Street, London, EC4P 4BY, tel. 01.248.8000, extension 3337.

John Gapper on industrial relations in the printing industry

The struggle to keep up with technical change

THERE ARE few industries in which relations between managers and workers have been so affected by technology over the past five years, as printing. The wave of technical innovation that has swept through newspapers, and is now making its way through other parts of the sector, has brought with it profound changes in the industrial relations climate, particularly in Britain.

The UK is only the latest country to be affected by such changes. The US has already been through a painful set of strikes and conflict over the advent of single-stroke inputting in newspapers. Clashes in France between Didier and members of the CGT sacked by the company mirror similar tensions over the future role of print workers.

For the unions in Britain and other countries, it has been a struggle to keep up with technical innovations that have already brought changes abroad, and inevitably will at home. Next month, a delegation from Britain's general print union, Sogat '82, will visit Japan to survey the latest vision of the future.

It is perhaps no more than an unfortunate coincidence that one of the last foreign trips made by Sogat leaders was to the United States to study innovations there. It came just too late to prevent a dispute that proved decisive to the union's influence within British national newspapers: that at Wapping, east London, with Mr Rupert Murdoch's News International.

The manner in which today's issue of the Financial Times was produced has much to do with that dispute, in which a national newspaper management decisively won an argument over the publication of its own titles for the first time in several decades. The FT's management had, in effect, lost a dispute involving similar issues in 1983, only to gain by Mr Murdoch's victory.

Yet to judge industrial relations in the British printing industry solely by the upheavals within national, or even provincial newspapers, would be a mistake. The irony is that, while newspapers have provided some of the most public of British industrial disputes in recent years, the printing industry as a whole has been among the most peaceful.

Department of Employment figures show the paper, print and publishing industries to have experienced relatively little industrial disruption. The print unions, most of whose membership is to be found in general printing companies, are enthusiastic about relations with the main employers' body, the British Printing Industry Federation.

Mr Andrew Brown, the BPIF's head of industrial relations, says the industry has been exceptional in maintaining an ordered set of national agreements against a background of Government pressure to break down bargaining structures to local and plant level. Wages, productivity and other conditions are still negotiated nationally.

Within these national structures, he believes, printing companies have managed to achieve significant productivity increases.

A problem about which the federation, and the industry's unions, are becoming concerned is growing skills shortages. The National Graphical Association skilled print union is seeking industry financial backing to set up its own training centre for the reskilling of members caught in the wave of technological innovation.

From the employers' side, among the the most significant technical changes to have occurred so far in terms of industrial relations are those within press rooms. The demands of new presses are likely to break down existing demarcations between the skilled machine minders, belonging to the NGA, and the semi-skilled Sogat members working as machine assistants.

Printing companies are increasingly likely to seek agreements to bring in a new grade of technical operator cutting across traditional skill and union boundaries as the technology frees them from old constraints. It is one of the pressures behind the moves towards an amalgamation of the NGA and Sogat to form an all-purpose print union.

Amalgamation of the two bodies has been bedevilled by rivalries over the differ regional structures, and tensions between the craft nature of the NGA and the more open structure of Sogat. Such delays have worried leaders of the Trades Union Congress, who see the media industry as one of the prime targets for the creation of an single industry-based union.

Yet there are now more confident predictions about an amalgamation next year that could ease problems between the two unions that have only been exacerbated by their differing approaches to technical change. No industry sector exemplifies this more than the provincial press, in which relations have become strained over the past two years.

The irony is that the printing industry as a whole has been among the most peaceful

In several provincial newspaper groups, direct input of both editorial and advertising copy has led to tension between unions by cutting across traditional areas of influence. In the editorial area, an accord with the National Union of Journalist has helped matters for the NGA. In the advertising area, there have been a series of disputes with Sogat over who should be responsible for what.

The NGA has resented the way in which some employers have managed to gain Sogat agreement to transfer members from the clerical area to the inputting of copy. A complaint to the TUC by the NGA led to a judgement broadly in its favour. The dispute is now in abeyance, partly because many crucial working agreements have already been reached, and partly because of amalgamation.

Even more worrying to both unions is the breach in the solid unionisation of the sector represented by what the Newspaper Society, the joint provincial newspapers' employers' body, calls the advent of "the non-traditional employee." In practice, this means part-timers, often women, belonging to no union, who work inputting editorial and advertising copy.

The Newspaper Society, long irritated by the unions' solid control of the sector, is happy about both this development and the growing trend within large provincial newspaper groups towards pushing journalists to agree to individual contracts rather than collective pay and conditions negotiations through the NUJ.

But it is in national newspapers that the most dramatic changes have occurred, with a wave a technical change held back before Wapping by the employers' failure to gain the agreement of print unions to controlled changes. All Britain's national newspapers have secured agreements to introduce single key stroking in the wake of Wapping.

For print workers in London and Manchester, this has meant redundancy in many cases and profound upheaval in others. The printing of the FT today marks a further stage in the move of print workers out of Fleet Street to slimmed-down operations in east London. Even for those not caught in the Wapping dispute, it has commonly been an uncomfortable experience.

Mr Alf Parrish, the NGA's national newspaper officer, believes the move from overcrowded plants in Fleet Street that often sailed close to the winds of health and safety regulations to the quieter and cleaner Docklands plants has reduced industrial relations tensions by changing the working atmosphere. The print workers' is now, he thinks more like just another job.

But Mr Parrish is already looking ahead to the next technical change on the horizon for NGA members, one which could threaten the NGA's remaining toehold on the composing area of national newspapers: electronic page makeup for both editorial and advertising. After the experience of Wapping, the British print unions are inclined to treat innovation in printing technology with due caution.

FUTURE TRENDS

Middle will be squeezed

Mr Brian Blunden: "There will be 50 big companies"

OVER THE past five years the advance of technology in the printing world has resulted in a fundamental change in the way many printed items, particularly magazines and newspapers, are produced. The key question now is whether that rate of change will continue apace.

That is one of the topics under consideration at PIRA, the UK research association for the paper, board, printing and packaging industries. The association's main role is to identify technological advances in the industry it represents, according to managing director, Mr Brian Blunden. "Our *job is to take what is not* widely known and be the agent to inform the practitioners so they can apply the knowledge to improve their businesses," he says.

Mr Blunden believes we have seen just the beginning of the technological revolution in the printing industry, and that a number of significant innovations will affect not only the type of products coming off the presses but the type of companies that will flourish as well.

"I can't help believing that we are bound to finish up with rather more big publishing companies and more smaller ones, with the ones in the middle squeezed out," he predicts. "I think we will end up with about 50 big companies worldwide."

The printing industry is already international, with publishing companies able to decide where they want their products published around the globe - in Europe or Asia, for example. Hand-in-hand with that development, he thinks the trend in newspapers and magazines is towards publications which are more internationally acceptable.

The growth in giant international publishing corporations and their move towards more globally-accepted products has been enabled, and will be further promoted, by communications technology, such as satellite and facsimile transmission. Three further innovations will have equally dramatic effects on the industry in the future:

■ Expert systems are computers which memorise and copy the way a skilled operator carries out a job. Developments there could result in a computer that memorises the design principles or typography of a newspaper or journal and reproduces it as required. "I don't think those things are totally a dream," says Mr Blunden. "It all depends on the software – that's the crucial element."

■ Non-impact printing is the second area, and Mr Blunden predicts that within 10 years there could be a non-impact colour printing machine on the market for volume newspaper or periodical production.

■ Automation has so far had little impact on the printing industry, but could transform it in the future. It may only be a matter of time before a company such as the Japanese organisation, Mitsubishi comes into the market. "One thing I find really interesting is whether a large automation company, like Mitsubishi, coming into printing from that angle, and a large printing company like Xerox, coming to it from their side, will eventually end up with the same product," says Mr Blunden.

A similar situation arose five years ago when the first desk-top publishing system appeared on the market – from an office automation manufacturer, not a printing company. Mr Blunden, who describes desk-top publishing systems as "a nice convenient commercial term for a personal computer with text and graphics output," thinks such systems will have a positive effect on smaller publishing companies.

It will mean a plethora of them will grow up to publish products in niche markets – such as research documents, restricted circulation books or newsletters.

Desk-top publishing will always be a small part of the market, he adds. "It's a nonsense to say that desk-top publishing will take over from traditional printing. Desk-top publishing will happen because it cuts costs, and I think many entrepreneurial publishers of the future will begin by using desk-top publishing systems. But most people have no skills in how to make things look nice, or in pricing, or advertising. That is why they will go to the traditional publisher."

John Arnold, head of Technical Services at the British Printing Industries Federation, which represents companies printing everything from cartons to van signs, and tin can labels to magazines, also believes the door is wide open for smaller companies in the printing industry. Mr Arnold foresees them specialising in a range of tasks, such as picture development, contract printing or typesetting – jobs which were previously done in-house by publishers.

One reason for that is the variety of equipment now produced for the industry: "30 years ago almost everything was printed on the same type of flat-bed press. But these days the different types of equipment are growing all the time," Mr Arnold says. As examples, he refers to laser printers and desk-top publishing systems, which take the onus away from the traditional typesetter and printer.

One of the main reasons for the diversity in products has been the inroads made by electronics into the printing equipment market. That trend is one of the hottest issues in the printing world, with manufacturers beginning to incorporate commercially-available computer products into their equipment, rather than building the hardware themselves.

That is particularly relevant for pre-press activities such as typesetting and graphic manipulation. For the manufacturers that means they will be able to introduce the latest products more quickly, since much of the hardware will be bought off-the-shelf.

Director of the British Federation of Printing Machinery and Supplies (BFPMS), Mr Geoffrey Crellin, believes it is one of the most important trends in the printing industry – "to comment on the electronics revolution has become something of a cliché, yet it has led to a fundamental change in the nature of our member companies' operations whether we like it or not," he says.

He thinks electronics has forced UK companies to ask what extra value they can add to standard products, rather than relying on the selling-phrase 'Made in Britain'.

The value of printing equipment manufactured in the UK is worth £800m a year, according to figures from the BFPMS, and about two-thirds of that equipment is exported.

As well as facing technological upheaval, the printing equipment manufacturers – like the publishing industry – has seen an unprecedented number of takeovers and a move towards the 'global company'. For example, British Crosfield Electronics (part of the De La Rue Group) has bought CSI, Hastech, Dicomed and Lightspeed; the German company, Hell (an affiliate company of Siemens) has bought Xenotron; and the Japanese Dainippon Ink Company has taken over the American group, Polychrome.

Della Bradshaw